

Public Utilities

FORTNIGHTLY



JUNE, 1939

THE CALCADE OF POWER

UTILITIES—FORWARD MARCH!

By Roger W. Babson

» »

Electrical Progress at the New York World's Fair

By Clayton Irwin

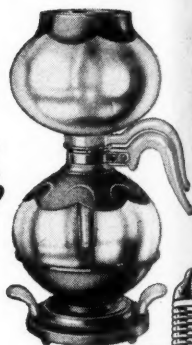
Greetings to the Edison Electric Institute Convention,
New York, N. Y., June 6-8, 1939

Still Time to Cash in on this Load-building Opportunity!



Genuine SILEX
GLASS COFFEE MAKER
TRADE MARK REGISTERED U. S. PAT. OFF.

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The New Catalina Model regularly \$8.45 for only \$7.45
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Catsup Dispenser (99c value) a \$9.44 total value **\$7.45**
for only



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Silex Exhibit at New York World's Fair Increases Your Load Building Market!

Genuine SILEX
GLASS COFFEE MAKER
TRADE MARK REGISTERED U. S. PAT. OFF.

The Silex Company, Dept. P-6, Hartford, Conn.
Creators of the Glass Coffee Maker Industry

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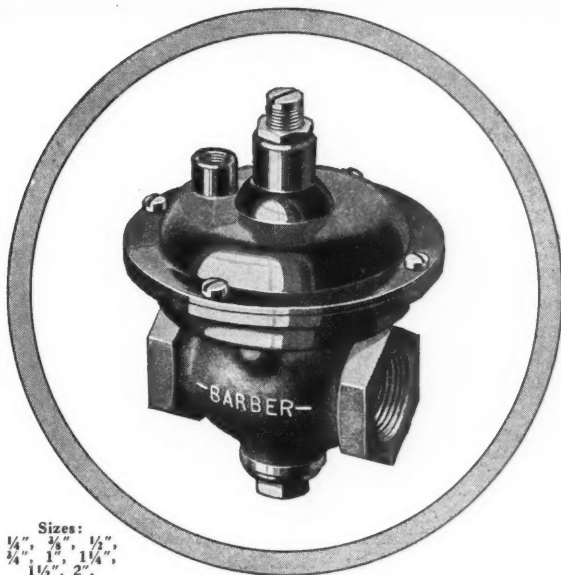
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Sizes:
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 $\frac{3}{4}$ ", 1", $1\frac{1}{4}$ ",
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Wherever Pressure Regulators are thoroughly analyzed, tested, and compared—Barber ranks with the best. Regulator *value* is not measured by price alone—Barber is the most economical *quality* Regulator you can buy. All bronze body—brass working parts. Clean cut in appearance—harmonizes with modern styling in gas appliances. Sizes $\frac{1}{4}$ " to $1\frac{1}{2}$ " certified by A. G. A. Testing Laboratory. For certainty of dependable service—insist on genuine Barber Regulators.

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Financial Editor—OWEN ELY

Public Utilities Fortnightly



VOLUME XXIII

June 8, 1939

NUMBER 12

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Q This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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JUNE 8, 1939

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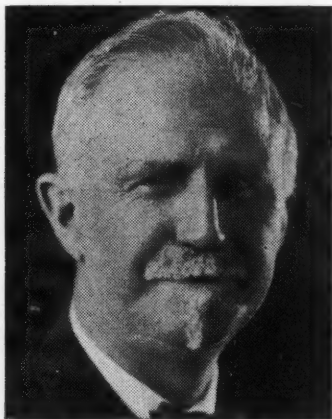


Pages with the Editors

THE progress of a nation, as well as the state of a civilization, can be measured in terms of its public utility service.

THIS thought occurred to us as we looked over the marvelous national, industrial, and cultural exhibits at the World of Tomorrow, which those attending the 1939 convention of the Edison Electric Institute will surely visit this month.

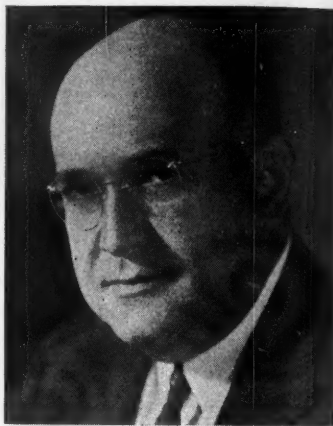
MAYBE some great man has said this before, or something like it. We ran through our *Bartlett's Quotations* and other standard references, but could find no corroboration from antiquity. However, consider the fact brought out by Dr. Robert A. Millikan (in an address before the Merchants Association, just prior to the opening of the New York World's Fair) that electric power production alone in the United States amounts to a hundred slaves for each of us as against a bare half-dozen per citizen in the next most progressive foreign country. It is this very abundance of power utilization, says Dr. Millikan, which explains the sharp difference between the high individual standard of living here compared with the very humble status of the average European and the virtual peonage of the Orient.



ROGER W. BABSON

When a man is on his back, there is only one way to look—up!

(SEE PAGE 710)



©Harris & Ewing

LOUIS A. JOHNSON

Preparedness is just as necessary in the power house as it is in the military service.

(SEE PAGE 716)

DOUBTLESS, this parallel between advanced utility development and high living standards would be applicable to the other great branches of utility service—communications and transport. Here in the United States, which contains a mere 6 per cent of the inhabited land area of the globe and only 7 per cent of the world population, there are two-fifths of all the railroad track, nearly three-fourths of all the motor vehicles, and one-half of all the telephones used in the entire world.

MAYBE the conclusion involves some confusion of cause and effect, but it does seem obvious that each nation prospers almost in proportion to the progress of its utility service. There are, of course, other reasons why one country flourishes more than another: abundance of natural resources and the native intelligence—to mention but two. Yet countries in other sections of the globe possess these attributes in varying proportions which rival those of the United States. So, after all, perhaps this idea of ours—that utility development is a necessary accompanying agent, if not the proximate cause of general internal progress of any nation—is as reasonable an explanation of international progress as some of the older and more orthodox solutions.

In the World of Tomorrow!!



When You Come To The Fair, See Remington Rand IN THE ELECTRICAL PRODUCTS BUILDING

The Office of Tomorrow will be electrified! An exciting preview awaits you at the great New York World's Fair. Your hour at Remington Rand Hall in the Electrical Products Building will be outstanding in your visit. Don't miss Remington Rand's giant display.

See how electricity will be harnessed to turn out tomorrow's figures—how accounting is to be more than ever a product of electric power—how statistical data will be produced with all of electricity's speed and timeliness.

See the effects of heat on tomorrow's records and how electricity simulates the inferno of a burning laboratory furnace.

See how electricity will become the shaver's friend, and note how electric instruments measure the difference between typing din and tomorrow's universal transcribing silence. See how record photography reproduces important business documents—with the aid of electric power.

Color, sound, motion and light are merged in our huge display. But the appeal is only incidentally to the eye and ear. The Office of Tomorrow will be built from today's ideas. For new, profitable ideas about administration of your office visit Remington Rand Hall in the Electrical Products Building.

*The Office of
Tomorrow*

Remington Rand Inc.
Street of Wings at Commerce Circle
NEW YORK WORLD'S FAIR 1939

THAT being the case, it would seem a proper editorial venture to take pride in the accomplishments of the electric power industry during those days of its annual conclave in New York city. Such is the thought behind the presentation of the graphic supplement, "The Cavalcade of Power," in this issue (beginning page 729). In the same mood, we also present a feature article describing the electric utility exhibits at the New York World's Fair by CLAYTON IRWIN, managing director of the Electric Utilities Exhibit Corporation (page 707). Finally, there appears in this issue (page 767) a group of special messages from electric utility companies of America, sent to us in celebration of the gala association of the seventh annual convention of the EEI with the World of Tomorrow.

IT has been some time—too long perhaps—since ROGER W. BABSON did a piece for the FORTNIGHTLY. The last appearance in this publication of this nationally known economist and business forecaster was in January, 1936. Since then a great deal of water has gone over the dam, as they say, and there has been a noticeable increase in the number of dams for it to go over—meaning, of course, Uncle Sam's recent flyer in hydroelectric operations. Be that as it may, MR. BABSON, who has quite a reputation for accurate prophecy in this respect, feels there is a solid basis for expansion of the utility industry if it would only forget Washington, take heart, and spend some overdue dollars. In his article in this issue, MR. BABSON tells utilities to "snap out of it."

THERE is also presented in this thick issue a brief discussion of the relationship of



NEIL M. CLARK

A nonprofit company becomes professional protector of the American buyer.

(SEE PAGE 718)

JUNE 8, 1939



CHESTER MERRILL WITHINGTON

He finds heroism in the saga of the kilowatt.

(SEE PAGE 726)

the electric power industry to the national defense, especially prepared for us by the chairman of President Roosevelt's National Defense Power Committee, LOUIS A. JOHNSON, Assistant Secretary of War. MR. JOHNSON was born and raised in Virginia, receiving his legal education at the old University of Virginia (LL.B., '12). He began the practice of law in Clarksburg, W. Va., which was interrupted by overseas service during the war when he served as captain of the Infantry and was decorated Commander of the French Legion of Honor. MR. JOHNSON became civil aide to the Secretary of War in 1933 and was appointed to his present post by President Roosevelt in June, 1937.

CHESTER MERRILL WITHINGTON, whose article, "Sixty Years of Electric Light and Electric Power," appears in this issue (page 726), is the secretary of "Edison Pioneers." The author is a native of greater Boston, whose hobby is digging into electric utility history. While thus engaged he noticed a gap in the literature of the industry prior to the U. S. Census report of 1902 and set about resurrecting data covering that and other periods of the industry's existence.

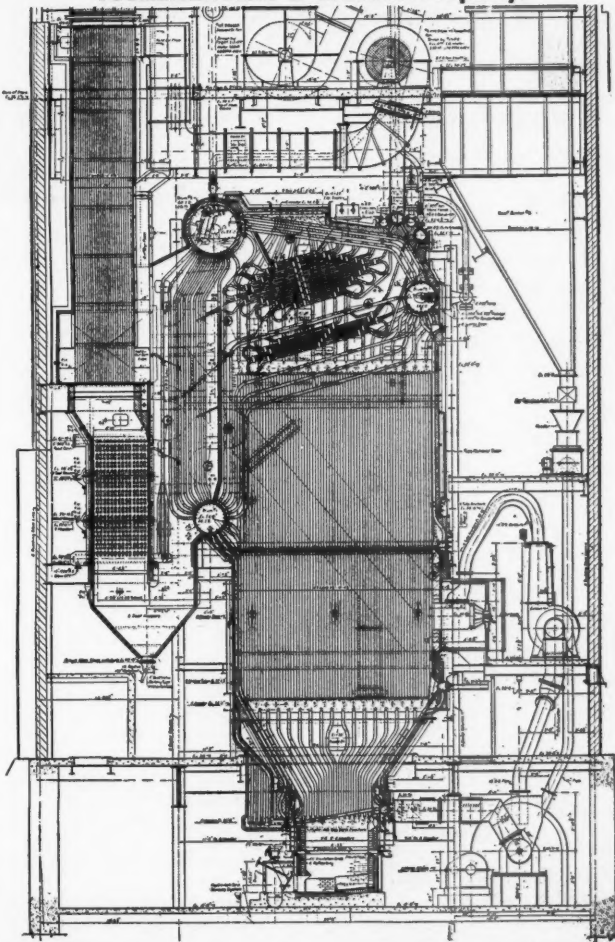
NEIL M. CLARK, the other author in this issue, is a former magazine editor (*System, Magazine of Business*), now engaged in free lance writing.

The next number of this magazine will be out June 22nd.

The Editors

RILEY STEAM GENERATING UNIT

Installed in the plant of
Central Illinois Light Company, Peoria, Ill.
(Commonwealth & Southern Property)



300,000 lbs. steam per hour, 900 lbs. pressure, 875° F. Steam Temperature

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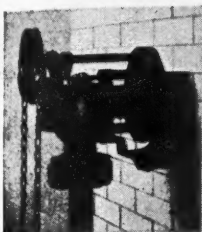
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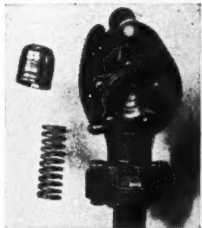
PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 65-128, from 28 P.U.R.(N.S.)



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The Vulcan Automatic Valve Operating Head is an advanced development for the high and ever increasing higher pressure and temperature conditions encountered in modern steam plants. Simplicity is the keynote in design and construction. A piston valve steam actuated thru a pilot valve provides positive operation—makes Vulcan Automatic Heads the greatest step ahead in Soot Blower Design in the past 15 years.



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Vulcan Valves of completely corrosion resistant materials and stainless steels are designed for immediate accessibility; they are so successfully designed that of thousands in use no valve of this type has ever failed in service. Vulcan construction permits adaptation to every increase in pressure for modern boilers—no valve stems break—no opening or closing against steam pressure—no regrinding of valves is ever required—valve packing eliminated. All Vulcan Heads are equipped with Vulcan pioneer Under Arm Supports which have eliminated leakage of elements.

**Lowest Cost? . . . NO!
Highest Quality?
emphatically YES!**

VULCAN
SOOT BLOWERS

—are built with but one object—to provide industry with the highest quality equipment of this type it is possible to build. Every steam plant offers new problems in soot removal—Vulcan Engineers have successfully solved thousands of such problems. Vulcan installations are soundly designed, individually designed to do their work efficiently and economically—*to cut fuel costs and provide real savings in steam production.*

From the desks of design and layout engineers to drafting room to factory craftsmen and to field service, Vulcan personnel takes pride in providing a personalized installation, built to exacting standards for long service and economical operation—backed by a record of lowest maintenance. *Ask the Vulcan Engineer representative why Vulcan must build to highest standards only.*



VULCAN VALVE DETAIL

Vulcan Soot Blower Corporation • Dubois, Pa.



Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE



HENRY FORD
*Founder of the Ford Motor
Company.*

"... we have scarcely entered upon the machine age as yet."

EDITORIAL STATEMENT
Industrial News Review.

"The investor is the senior partner in American industry..."

FRANK MURPHY
*Attorney General of the United
States.*

"A justified belief in our Federal courts is the cornerstone of my faith..."

THOMAS J. WATSON
New York World's Fair Official.

"Unfair criticism of government by business and unfair criticism of business by government are trade barriers that affect us all."

UPTON SINCLAIR
Author.

"The cure for the evils of democracy is more democracy. The cure for the evils of political democracy is democracy in politics."

THOMAS N. McCARTER
*Chairman of the Board, Public
Service Corporation of New
Jersey.*

"... the great earner for the Public Service property has been the electric department, which has grown enormously and bids fair to continue to do so."

HOWARD BRUBAKER
Writing in The New Yorker.

"Scientists are on the trail of an explosive uranium atom which would blow up the entire metropolitan district. Those boys should be hired at an enormous salary to quit working."

CHARLES E. CAREY
*Former Acting Bonneville Admin-
istrator.*

"The release of low-cost hydroelectric power over the far-flung Federal transmission network opens an unequalled opportunity for the exploitation of Northwest mineral resources."

EDWARD C. EICHER
*Member, Securities and Exchange
Commission.*

"The administrative agency is the mechanism by which a responsive government works responsibly; ... It would be hopeless to attempt to exercise the workaday powers of government by any other means."

HARRY L. HOPKINS
U. S. Secretary of Commerce.

"I find some utility executives convinced that much of the past development within the [electric utility] industry was thoroughly bad and they are anxious to see eye to eye with the government on a permanent policy."

"WE MET THE HOURS PROBLEM in this office BY ELIMINATING NEEDLESS OPERATIONS"

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The best way to locate the unproductive, unnecessary operations that hamper an office force in its work is by a desk-to-desk survey. And the best start toward meeting the problems thus set up is to investigate the many new and improved Burroughs machines and features that save time and money by providing practical short-cuts. Your local Burroughs representative is available for any information you may want—any service you may require. We suggest that you phone him—or, if more convenient, write direct.

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"Strangely enough we are at least fifty years behind times in our local voluntary plans for flood control."

JOHN E. RANKIN
U. S. Representative from Mississippi.

"The TVA is the most profitable investment the American people have made since the Louisiana Purchase."

EDITORIAL STATEMENT
Broadcasting.

"Upon the FCC (television) committee and upon the broadcasters rests the obligation to insure that visual radio becomes 'Television by the American Plan'—free and competitive and impelled to progress by the stimulation of the profit motive."

USHER L. BURDICK
U. S. Representative from North Dakota.

"If those who maintain that private business is superior to government business do not coöperate in circulating buying power at the very bottom of our social structure, then the natural course of events will destroy all private business, and a government in this country will dictate all business, public and private."

JAMES F. FOGARTY
President, North American Company.

"The conservative financial structures of North American subsidiaries are the foundation of their sound development, enabling them to obtain necessary senior capital and to maintain facilities for providing dependable electric service to their customers at rates which are among the lowest in the United States."

M. J. GORMLEY
Executive Assistant, Association of American Railroads.

"Waterway and highway transportation are not cheaper than rail transportation when all costs are considered. If you add to the actual costs of the transportation by highway or waterway the additional cost now paid by the taxpayer, then rail transportation is cheaper than either waterway or highway transportation."

OWEN D. YOUNG
Chairman of the Board, General Electric Company.

"I am in favor of temporary deficit financing provided that it is supplemented by an affirmatively stimulating and helpful attitude toward the railroads, toward the utilities, and toward the construction industry, and provided further that there be such revision of tax laws and a suspension of such threats and restraints as will really enable all stimulants to work. . . I am strongly inclined to think that the capital gains tax is a wholly undesirable item in a program of national taxation."

No. 15 of a Series

MODERN STEAM GENERATING UNITS

IOWA POWER & LIGHT COMPANY

DES MOINES, IOWA

Capacity—411,200 lb. per hr.

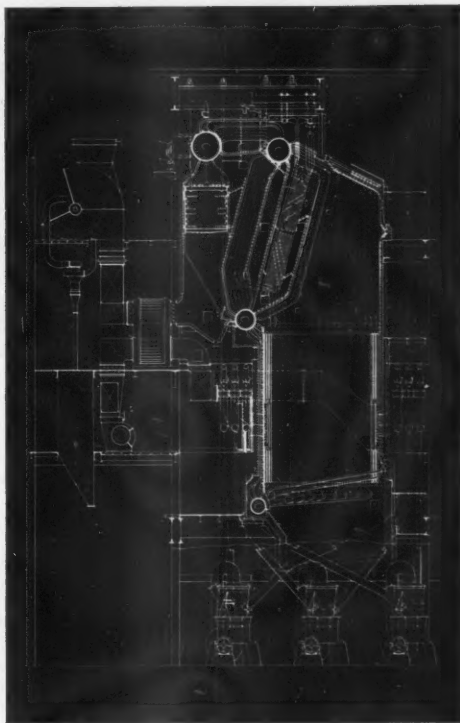
Design Pressure—1475 lb.

Total Steam Temperature—925F.

The sectional elevation at the right shows a C-E Unit recently placed in operation at the Des Moines Plant of the Iowa Power & Light Company.

This C-E equipment includes a Type VS Boiler, Water-Cooled Furnace, Bowl Mills, Tangential Burners, Elesco Superheater, Elesco Economizer and Ljungstrom Air Heaters.

Each of the three pulverizers supplies coal to one nozzle of each of the four burners, an arrangement which provides maximum flexibility of burner control for variable load conditions. The furnace is of the dry bottom type.



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C-E Products include all types of



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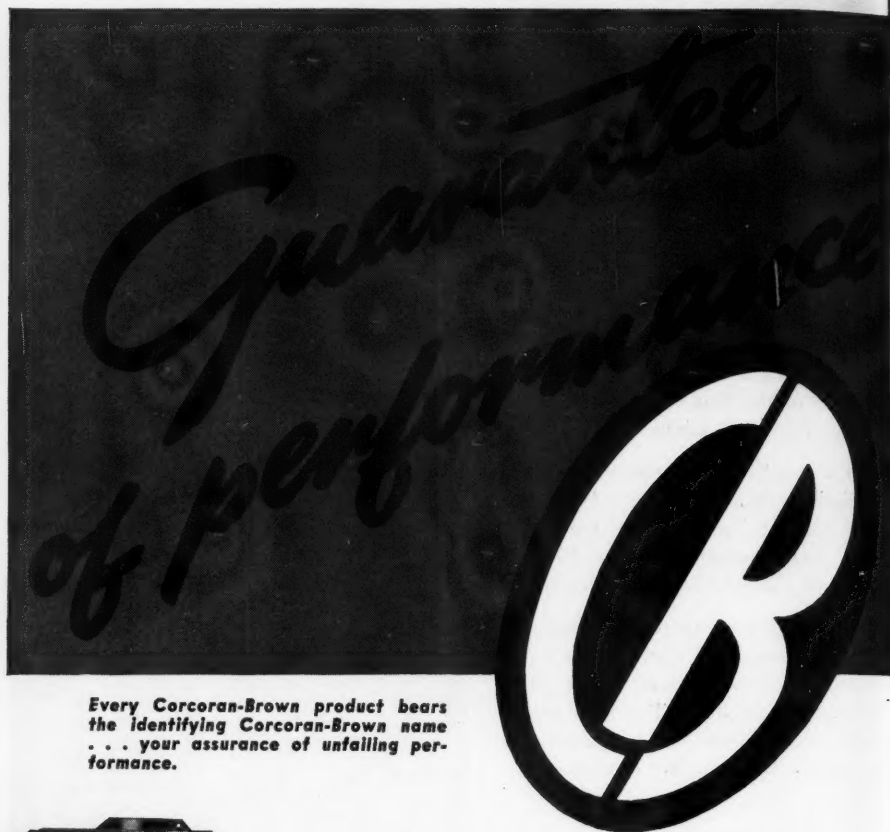


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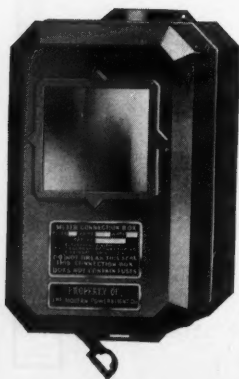
COMBUSTION ENGINEERING

COMBUSTION ENGINEERING COMPANY, INC., 200 MADISON AVENUE, NEW YORK, N. Y.

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Illustrated is the C-B 14 aluminum meter enclosure for outdoor and indoor new sequence metering.

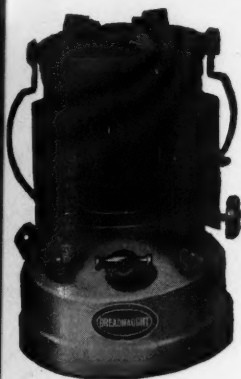
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Electrical Department
CORCORAN-BROWN LAMP DIVISION
 THE ELECTRIC AUTO-LITE COMPANY

4900 Spring Grove Avenue

Cincinnati, Ohio



Wall "Big Brute" Dreadnaught splicer's furnace (*above*) has an extra wide tank, hinged flue, heavy burner with removable jet and operates efficiently on kerosene or gasoline.



Wall Dreadnaught blow torch (*center*) is especially noted for its rugged construction and low fuel consumption. Operates efficiently in an inverted position and at any angle.

Wall jacketed compound kettle (*right*) for melting joint filling compounds is made of heavy steel with bottom and spouts brazed. The outside jacket completely covers sides, top and spout.



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THE three Wall Products illustrated exemplify the high quality of design and materials and the expert workmanship which is the Wall users' guarantee of complete satisfaction.

P. WALL MFG. SUPPLY CO., PITTSBURGH, PA.

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TRACTION
DYNAMOMETER**

- Since the stringing of the first telegraph wire, construction engineers have wanted an instrument for registering the pound pull being put on wires and messengers when being installed and throughout maintenance. An instrument to eliminate judging tension by sag; one within purchasable price range. Such an instrument is now available—The

DILLON DYNAMOMETER

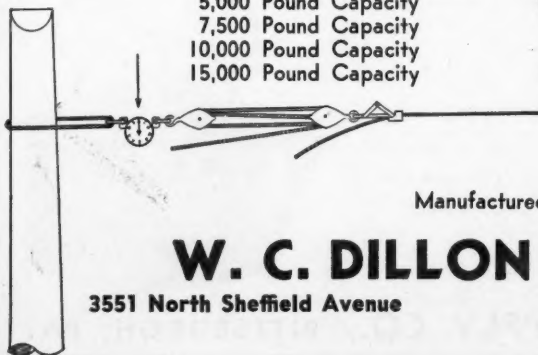
- The Dynamometer is used in series with a block and tackle to register the pound pull being applied to a cable, guy or messenger. For getting the strain even where more than one guy wire is used to hold a pole, or where two or more cable messengers are parallel; for measuring strain of lines crossing railroads.
- The Dillon Dynamometer has Accuracy. Adaptability. Strength. Portability. Light Weight. It is designed to give continuous service over a prolonged period of years without deterioration. The instrument cannot be injured by 100% overload, or from a recoil due to breakage of equipment or messenger.
- The use of a DILLON DYNAMOMETER is "Insurance" against break-downs. Its use will add security to outside plant. Write for trial test—stating capacity—at our expense.

Price F.O.B. Chicago

5,000 Pound Capacity	\$84.50
7,500 Pound Capacity	91.00
10,000 Pound Capacity	97.50
15,000 Pound Capacity	117.50

SPECIFICATIONS

Metal, High Duty Alloyed Steel
Tested to 100% overload
Dimensions, 7 1/2" x 5 3/4" x 2 3/8"
Weight 6 pounds



Manufactured by

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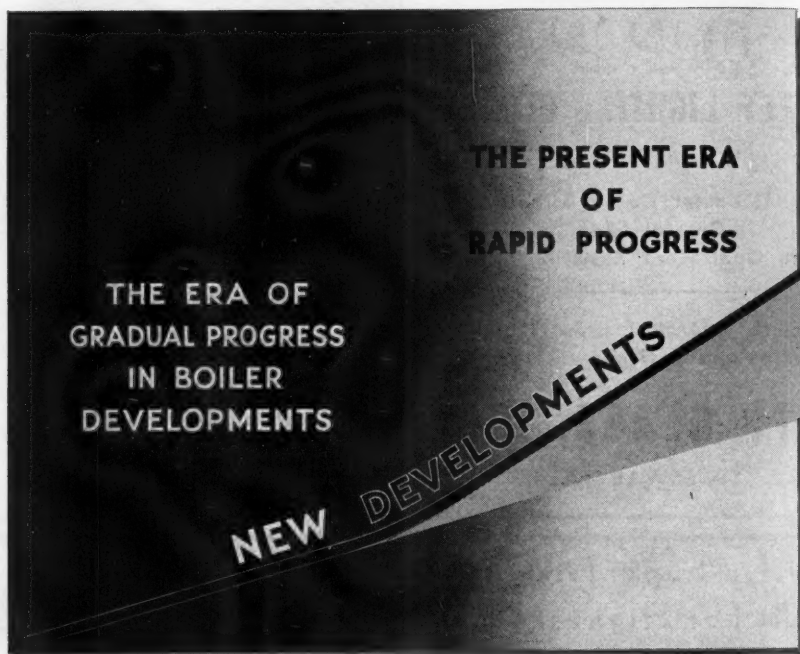


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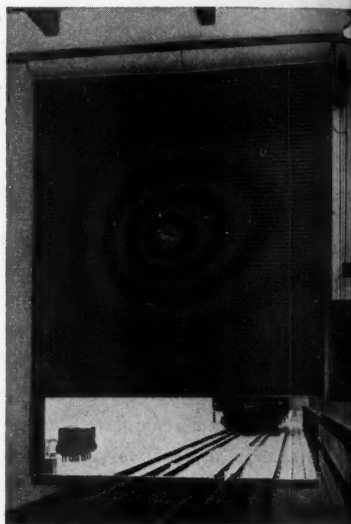
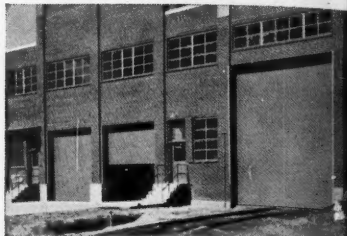
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[WHEN NO OTHER TRUCK HAS ALL THESE FEATURES
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1/2-TON PANEL
116" Wheelbase
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Delivered at Detroit, including 4 double-acting hydraulic shock absorbers, spare tire, front and rear bumpers and Federal tax. Transportation, State and local taxes (if any), extra.

Luxurious Comfort for the Driver

Dodge Truck seats provide real "easy-chair" comfort. Wider windshields and windows give maximum vision. Ventilation through both cowl and windshield is another Dodge driver-comfort feature!

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Dodge gives you new dependability in vital units, too! The super-tough Amola Steel in Dodge axle shafts and springs, for example, was developed expressly to meet new and more

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And Dodge powers each truck model with a truck engine expressly designed to match the load capacity of the unit—to cut your gas and oil costs to the minimum that is possible with good performance.

Go to your Dodge dealer, and see for yourself how many extra money-saving advantages like these you get in 1939 Dodge trucks, at prices that are right down with the lowest.

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Circulating Air Is Natural, Healthful Cooling Safe For The Office--Home--Even The Hospital

CIRCULAIR provides cooling comfort, free of the annoying blasts, drafts and noise. Simply quiet, effective air recirculation. CIRCULAIR is recognized and recommended for SAFE COOLING. It gently but effectively picks up the COOL AIR from the floor and recirculates it over a wide area.

A Size and model to fit almost any application.



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The Kisco CIRCULAIR represents the Last Word in Low Cost Summer Comfort. Thousands are already providing safe air recirculation. Many thousands will be in use during the coming weeks.

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If you are looking for THE LINE, take hold of the Kisco Line NOW and get your share of the Profit Business.

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Write for your copy of—

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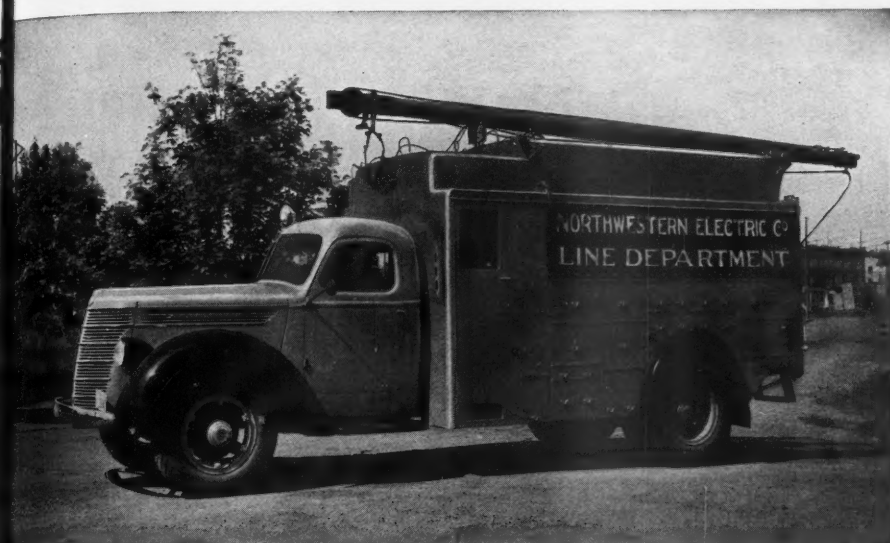
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*Designers and Manufacturers of
Cooling and Ventilating Equipment*



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The Northwestern Electric Co., Portland, Ore., uses this International as a line truck. The body was designed by its engineering department. It won second place in the Automotive Bodies division in the contest on "Arc Welding and Its Applications" sponsored by the James F. Lincoln Arc Welding Foundation.

Invest in INTERNATIONALS for Lasting Truck Value

There is one line of trucks that meets every hauling requirement and gives you the greatest value per truck dollar:

That's the International line!

Whether you need light units from 1/2 to 1-ton capacity, medium heavy-duty trucks, or big heavy-duty trucks, there are Internationals to fit your job exactly.

And as for truck value: One look at an International will show you they are

sturdy, rugged trucks, built to take a lot of punishment throughout their long life. And when you get into the details, you really begin to appreciate the *quality* of International construction and the money-saving features engineered into these trucks . . . all designed to give owners the best in performance at low operating cost.

Investigate International Trucks now. The nearby International dealer or Company-owned branch will give you a demonstration at your convenience.

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INTERNATIONAL TRUCKS

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THE ROBERTSHAW DOLL THEATRE
SELLS MODERN GAS RANGES FOR YOU!



*"But, my dear,
 HOW do you
 FIND THE T-I-M-E?"*

*"Why, I've a ROBOT
 working for me!"*

They're hearing it now—those crowds that are flocking to the New York World's Fair. They're hearing the dramatic story of modern progress in terms of the modern gas range. And they're going back home determined to get their share of the World of Tomorrow—today.

The Doll Theatre at the Fair is just one more means for Robertshaw to carry to the millions the stirring message of automatic heat control, to fix in their minds the Robertshaw dial as a definite symbol of gas range excellence, to make it easier for you to sell Robertshaw-equipped ranges.

ROBERTSHAW
THERMOSTAT COMPANY
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HELP YOUR SALESMEN!... Put this radically new kind of sales manual in their hands. We supply it FREE!

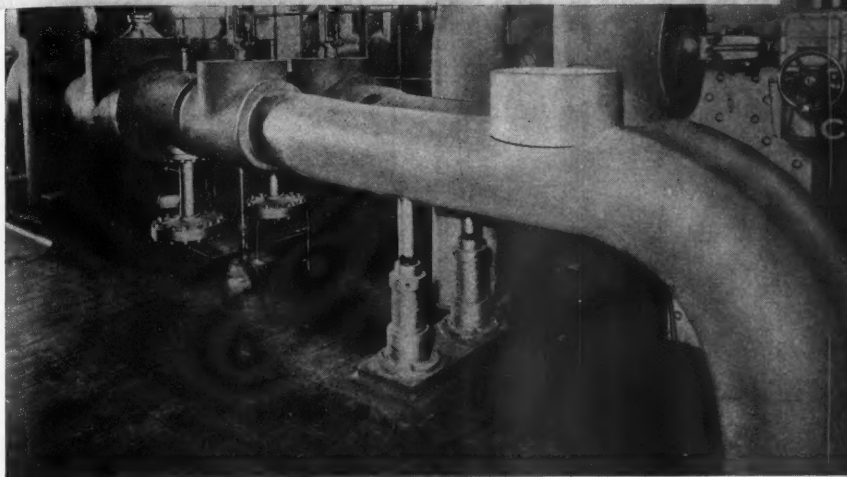
"More Income" is geared to today's selling needs, marks an entirely new approach to gas range promotion, brings a wealth of new facts, new ideas, new methods to the salesman's finger-tips. Hardly off the press, "More Income" has already evoked

an amazing response, has brought enthusiastic cheers from even the most successful salesmen. How many copies do you need for your staff?



8, 193

FOR SAFETY, DEPENDABILITY AND ECONOMY SPECIFY
J&L SEAMLESS IN YOUR POWER PIPING INSTALLATIONS



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With J&L Seamless Pipe carrying the load, you are sure of the utmost safety. There can be no failure at or near a weld . . . for there are no welds . . . no weak spots.

Installations in power and manufacturing plants all over the country are proving the merits of J&L Seamless. The piercing and rolling process which Jones & Laughlin manufactures Seamless Pipe literally rolls extra life and extra strength into every length of J&L Seamless.

Gain the extra advantages . . . the longer life . . . the greater safety . . . that J&L Seamless Pipe gives you.

Make your maintenance dollar go farther. Specify Jones & Laughlin Seamless Pipe for all your power and process needs. Write for a copy of our pipe handbook SP4.

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J&L — PARTNER IN PROGRESS TO AMERICAN INDUSTRY

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our staff

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**When you come to the
WORLD'S FAIR
E. T. L. invites you to
see its new home**



We invite you to enter this doorway, when you come to New York, on your way to the World's Fair. Perhaps it will open up a new viewpoint on testing and research to you. For this is the doorway of the new building of Electrical Testing Laboratories.

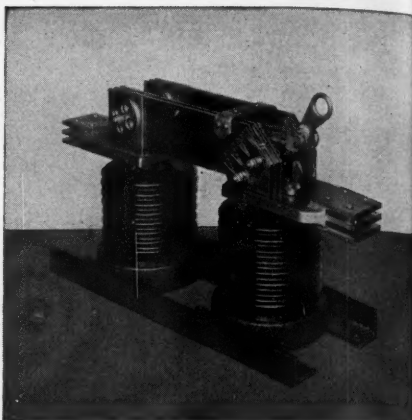
Step in and see for yourself how more space, better arrangements and additional equipment in E. T. L.'s new home help us serve you better and more swiftly . . . in providing accurate, unbiased data on products which you buy, sell, service or use. Such data gives our clients basic facts for sound business judgment; sometimes provides authoritative selling points.

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Electrical Testing Laboratories

East End Avenue and 79th Street
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Years of successful experience with Hi Pressure contacts on outdoor equipment has proven their advantage and effectiveness. Their application to the Type "HPS" Indoor disconnecting switch shown above has resulted in much higher efficiencies along with easier operation. Concentrated contact area under high pressure assures a clean metal to metal contact at all times.

All switch parts are non-ferrous, brushed and lacquered for appearance. Note that all switches have double blade construction for strength and rigidity.

**RAILWAY & INDUSTRIAL
ENGINEERING CO.**
GREENSBURG, PA.

Sales offices in principal cities

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Here's how you, too, may profit
by placing your boiler
insurance with Lumbermens

IT WILL pay you to investigate Lumbermens Mutual before you place your boiler and machinery insurance. Here's why:

FIRST of all, Lumbermens boiler policyholders have consistently received dividend savings of 25% of the premium on boiler and machinery insurance. Those dividends have meant an outright saving of one-fourth in insurance.

SECOND, Lumbermens inspection service prevents losses for all Lumbermens policyholders. Plant owners actually save because of accidents that don't happen! Lumbermens pick their inspection engineers carefully. You will find their men trained specialists whose life work has been in the

manufacture, inspection and maintenance of boilers and machinery. Although you may pay more, you can't secure a better inspection service anywhere.

THIRD, Lumbermens policyholders receive this fine service, and those important dividend savings on a broad policy backed by a company with over \$34,000,000 in assets, and a record of sound management for more than 25 years.

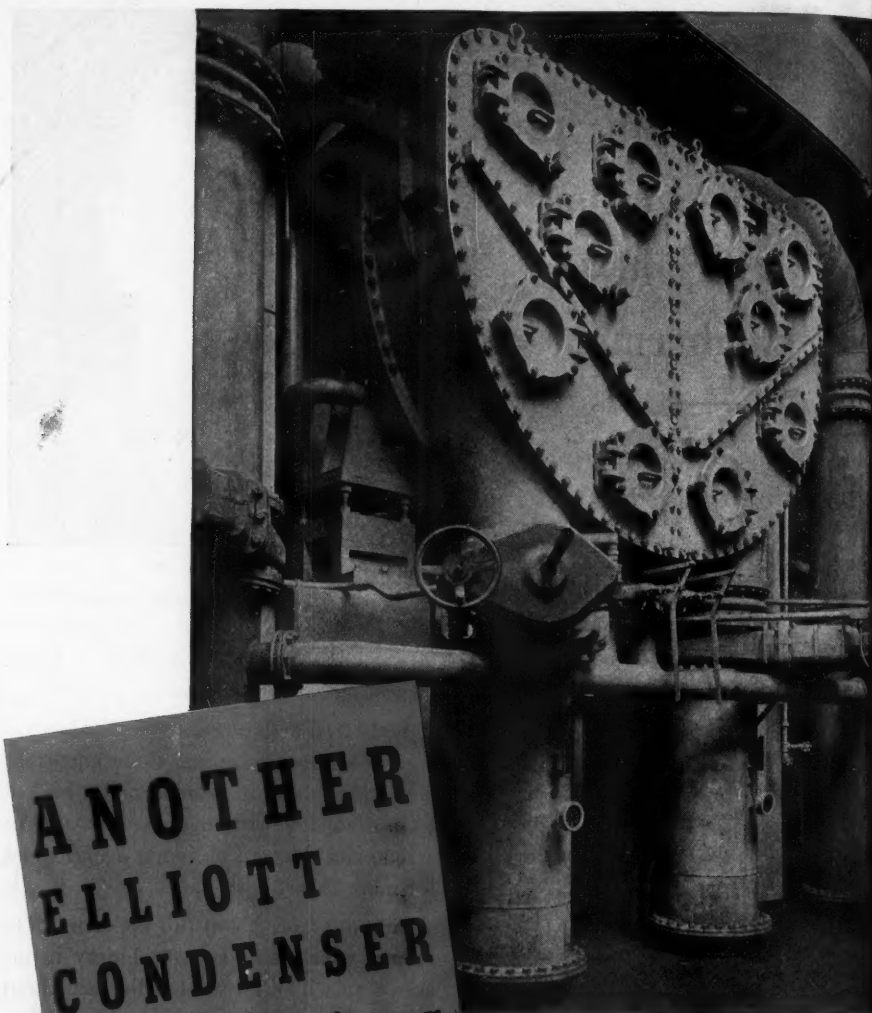
Find out more about this opportunity to reduce your boiler and machinery insurance costs with safety. Get all the facts about Lumbermen's savings, security and fine service. An inquiry on your letterhead will bring you prompt information without delay.

LUMBERMENS MUTUAL CASUALTY COMPANY

JAMES S. KEMPER, *President*

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Save with Safety in the "World's Greatest Automobile Mutual"



**ANOTHER
ELLIOTT
CONDENSER
at Mad River
Station**



ELLIOTT Products include

TURBINE GENERATORS • MECHANICAL DRIVE TURBINES • ENGINES • ENGINE GENERATORS • CONDENSERS
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ELECTRIC HEATERS • TUBE CLEANERS • SEPARATORS • STRAINERS • GREASE EXTRACTORS • NON-RETURN VALVES

A really beautiful installation of the Elliott 18,200 sq. ft. surface condenser which serves the 20,000 Kw. turbine at Mad River Station of the Ohio Edison Co., Springfield, Ohio.

ELLIOTT COMPANY

Heat Transfer Dept., JEANNETTE, PA.
District Offices in Principal Cities



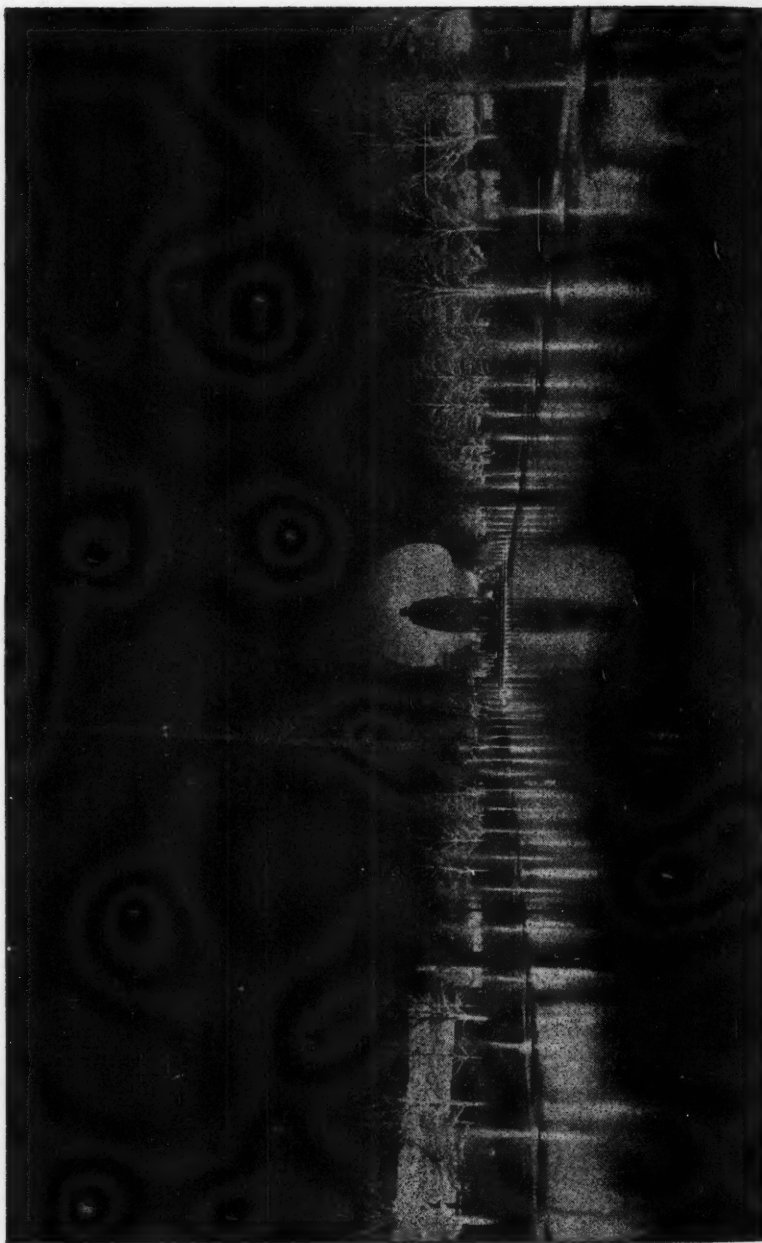
Utilities Almanack

☿

JUNE

♄

8	T ^h	¶ Edison Electric Institute concludes convention, New York, N. Y., 1939.	
9	F	¶ Empire State Gas and Electric Association opens group meeting, New York, N. Y., 1939.	☾
10	Sa	¶ Economics Conference for Engineers will be held, Johnsonburg, N. J., June 24-July 3, 1939.	
11	S	¶ American Water Works Association opens annual convention, Atlantic City, N. J., 1939.	
12	M	¶ International Commission on Illumination convenes for session, Scheveningen, Holland, 1939.	
13	Tu	¶ Wisconsin State Telephone Association and Wisconsin Locally Owned Telephone Group begin meeting, Madison, Wis., 1939.	
14	W	¶ American Society for Testing Materials will hold annual meeting, Atlantic City, N. J., June 26-30, 1939.	
15	Th	¶ American Institute of Electrical Engineers will hold meeting, San Francisco, Calif., June 26-30, 1939.	
16	F	¶ International Chamber of Commerce will begin session, Copenhagen, Denmark, June 26, 1939.	
17	Sa	¶ Michigan Gas Association will hold session, Mackinac Island, Mich., June 29-July 1, 1939.	☼
18	S	¶ Public Utilities Advertising Association starts annual convention, New York, N. Y., 1939.	
19	M	¶ Society for the Promotion of Engineering Education starts annual meeting, State College, Pa., 1939.	
20	Tu	¶ American Society of Civil Engineers will convene for session, San Francisco, Calif., July 26-28, 1939.	
21	W	¶ Canadian Electrical Association opens convention, Digby, Nova Scotia, 1939.	



Acme Photo

A miracle of modern lighting paints a glowing picture of the World of Tomorrow at the New York World's Fair. The view above from the far end of Constitution Mall shows the heroic figure of George Washington silhouetted against the Perisphere.

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Public Utilities

FORTNIGHTLY



VOL. XXIII; No. 12

JUNE 8, 1939

Electrical Progress at the New York World's Fair

*Spectacular presentation of the industry's
rôle in the nation's growth.*

By CLAYTON IRWIN

IT is most fitting that leaders of the electric light and power industry should be meeting this year in New York where the World's Fair of 1939 is giving constant testimony to the great part that electricity plays in making possible such a grand spectacle. Not only is the Fair indebted to electricity for the wealth of its efficient, up-to-date applications throughout the 1,216 acres, but also for eleven of the principal exhibits at the Fair which demonstrate various phases of electricity's place in the World of Today and Tomorrow.

These exhibits, which help to tell the

story of electricity and its manifold uses, are:

Forward March of America and the Electrified Farm, sponsored by nearly 150 electric utility companies
The Consolidated Edison Company Exhibit
The General Electric Company Exhibit
The Westinghouse Electric & Manufacturing Company Exhibit
The Electrical Products Building (various manufacturers)
Carrier Corporation Exhibit (air conditioning)
American Telephone and Telegraph Company Exhibit

PUBLIC UTILITIES FORTNIGHTLY

Radio Corporation of America Exhibit
Crosley Radio Exhibit
Town of Tomorrow

The Edison Electric Institute convention delegates will, of course, be especially interested in the industry's two exhibits sponsored through the Electric Utilities Exhibit Corporation and made possible by some 150 electric light and power companies east of the Rockies. One of them, "Forward March of America," is a spectacular presentation of the electrical industry's rôle in the nation's growth.

The most breath-taking exterior feature is the 40-foot waterfall, cascading from the top of the building into the serpentine pool below. At night this is further enhanced by playing high intensity, mercury-vapor searchlights on the waterfall and the pool.

A 150-foot transmission tower dominates the building, adding its graceful contours to the general attractiveness of the whole structure and after dark transforming its steel struts into silver traceries. At night the tower is visible from almost any point in the Fair.

ANOTHER distinctive feature of the exterior is a huge cut-out relief constructed of brass and copper, 24 feet high and 140 feet long, showing symbolically the generation of electricity—the digging of coal, the huge turbines and generators in the power plant that transform the coal into electricity, the transmission lines and distribution systems that carry the electricity to homes, offices, stores, factories, mines, farms, mills—everywhere in the country.

Housed in this colorful U-shaped

structure, alive with impressive symbols of the industry, are two contrasting streets, one of 1892, called the "Street of Yesterday," and the other the beautifully illuminated "Avenue of Tomorrow."

While everyone is generally familiar with the accomplishments of electricity, this dramatic contrast brings home to the thousands of people who inspect this exhibit a real appreciation of the contribution electricity has made and is making today in the life of the individual, the community, and the nation itself.

The cobblestoned, gas-lit street of 1892 recalls to visitors its actual counterparts of nearly fifty years ago, when dim-lighted stores and residences crowded the narrow thoroughfares, and is historically real enough to impress the younger visitors with the great strides that have been made in the intervening years. The "Avenue of Tomorrow" shows a street of the future, but it is not so far removed from much that is already practical with our present electrical advantages. Here is living proof of the fulfillment of the pledge of the 1892 electric company "to serve the progress of America by extending the uses of electricity." Here are vivid reminders of electricity's place in our world—in the home, commerce, industry, transportation, communication, entertainment, medicine, and surgery, as well as safety and protection on land, sea, and in the air.

As a climax to the literal story of electric power's contribution to America's progress, our visitors are thrilled with an electric display of transcendent beauty in the Rocket Room where light, color, and music are

ELECTRICAL PROGRESS AT THE NEW YORK WORLD'S FAIR

combined in a most awe-inspiring spectacle.

The other exhibit sponsored by the Electric Utilities Exhibit Corporation is the "Electrified Farm," where more than 100 practical applications of electricity on the farm are in actual use.

Here visitors see an actual working farm efficiently and completely equipped—a two-story house, silo, barn, flower and vegetable gardens, shade trees, orchards, bull-exerciser, milking parlor, dairy room, horse shed, workshop, poultry house, brooder, greenhouse, hotbeds, community packing house, cattle, horses, chickens—all on less than one acre.

The nearly 1,500,000 farms in the United States receiving electric service are already using much of the electrical equipment demonstrated on this farm, but many more of the new, tested, and proved practices, well within the means of average farmers, are also shown here.

This is no dream farm of the future—it is a real, practical demonstration of what electricity can do for the farmer today—how it can make farm life more comfortable for the farmer and his family and how it can increase farm profits.

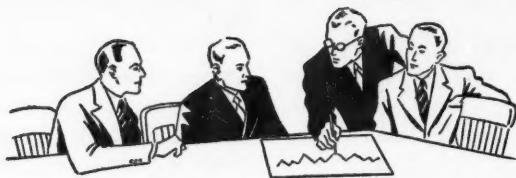
Although we have a natural pride in the presentation of these two exhibits, our hopes for them as a center of interest have been more than realized by their great popularity during the early part of the Fair. The cascading tons of water have attracted thousands of visitors to our "Forward March of America" and built up for it a reputation as one of the outstanding centers

of interest of the New York World's Fair.

THE Electrified Farm, too, from the opening of the Fair, has been a continual source of interest to city dwellers as well as farmers. This exhibit has served not only to emphasize the advantages of modern methods to the farmers themselves, but also it has done a great deal to impress the average citizen with the effectiveness and importance of electricity as an aid in the production of the food supply of the nation.

As a final touch, the element of personal service is emphasized through the Personal Service Bureau in the lounge of "Forward March of America." Customers and employees of the participating companies have made advantageous use of this bureau's personalized tour service to save time and money in fully covering the Fair's points of interest. Requests sent in through the operating companies for this personal service are being answered by the thousands, a response indicating that the companies are doing another good job of customer-service, another addition to the many services rendered in the day-to-day business of the industry.

This spirit of public service, which has permeated the design, construction, and operation of these exhibits, is a principal factor in their success. In fact, these exhibits are the products of concerted action in an industry whose long-standing tradition of public service makes all of us justifiably proud of our association with it.



Utilities—Forward March!

Anyone who is interested in finance or business economics of the United States knows well enough the national reputation of the author of this article without further description. But to many outside of these circles, Roger Babson is widely known as one business prophet who predicted the recent economic depression long before the crash of 1929. Needless to say, this fame in forecasting was based on neither chance nor magic, but upon a sound foundation of skilled observation, plus astute analysis. Consequently, it will be with more than passing interest that readers of this article learn what Mr. Babson sees ahead for the electric utility industry in the United States—if it will only overlook its political difficulties at Washington and elsewhere and spend some long overdue dollars on a solid basis for industrial expansion. Relative prosperity is already knocking on the door, in the opinion of this author, if the electric industry will only "snap out of it."

By ROGER W. BABSON

I HAVE felt for a long time that the utility industry, in spite of the insistent and at times almost insidious persecution it has suffered, would soon be due for a turn for the better. Just recently, in the light of current developments, I feel that the time has come when I want to go on record as saying that the utilities are scraping bottom. As the old adage goes, when a man is flat on his back there is only one way for him to look and that is up. When applied to the utility industry, when the many operators in the field have taken about as much as they can stand, when they are down in the mouth, then watch out, conditions usually change rapidly.

Every day seems to add fresh evidence that we are about to witness a "rebirth" of the utility industry. Proponents of economy in Washington, and their tribe are increasing, are

pushing for a tightening up on appropriations for TVA. Talk of new government-sponsored power projects in other sections is not making much real headway. Funds for financing municipally owned plants are not being poured out in the early New Deal fashion. Pressure groups are even making great strides in demanding honest accounting methods for the already existing municipal plants. In cases where the city has found it more advantageous to take over the privately owned power provider, the tendency has been to mediate for a "fair price." I have given you just a few of the many developments that lead me to believe that better days are ahead for what has become the "Number One Necessity—Electric Power."

OF course many of my ultra-conservative friends say that this

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so-called swing to the right for the utilities is just another flag-waving episode. They admit that the utilities are scraping bottom, but they claim it is another false bottom. They feel that just as soon as business conditions improve and confidence is again flowing freely, the whip hand of the administration will once more be raised and the utilities will have to take ten more lashes at the hands of the persecutors. I agree with them up to a certain point. It would be impossible to determine just what steps the present administration plans on taking towards this industry. However, the pendulum of evidence is swinging strongly towards the right.

The past few years of grief have not been entirely wasted. The vast utility industry has much for which to thank the administration. Many of the abuses of the Twenties have been liquidated. Many of the larger utility magnates used to disregard entirely the wants and wishes of the public. They lived on their so-called "monopoly" and the rest of the world liked it or did without. A few blew up the balloon of overvalued property and when it would not hold even one more puff of air, they rushed out and sold a get-rich-quick issue of common stock. Thus in the days when everything was headed for a "1,000" several of the utility lords got themselves in trouble with the public. In those days, when the public was troubled it was a golden opportunity for the government to step in and do some investigation on its own account.

THE slogan of "crack-downs on the power interests" swept many an enterprising politician into office. It

was the talk of the times. Just the mention of the power interests and many business men, who were readily prompted by the politicians, would fly into a rage.

The pendulum was released and what a swing it made to the left! For almost ten long years this persecution has been going on at an accelerated pace. Is it any wonder that many of the utility executives have started to go down for the third time? Is it amazing then that many feel this cloud of indecision and suspicion will never lift? That the current let-down in persecution is only an interlude?

FIRST, let us look at the actual record of the utility industry during the past ten years. In the early months of the boom year 1929, monthly production of kilowatt hours amounted to only seven and one-half billion. At the peak of that same year, we were supposed to be entering the door into a new era. The persecution in those days was not directed at the utilities, but at a few like myself who dared to give words of warning; meanwhile kilowatt hours crossed the eight billion mark. It is true that during the days of depression, when people turned their lights off early and when factories were either closed or working one or two days a week, monthly power production did slump to six and one-half billion. However, what happened when business finally left the doldrums of despair is well known by all. During the inflation scare days of 1937, monthly electric output almost reached the ten and one-half billion peak. Even now when business is suffering from "scaritis," production is well over the ten billion mark.

PUBLIC UTILITIES FORTNIGHTLY

THE most encouraging sign to me is the rate of growth of electric power. I have just completed a study of the growth rates of many of the leading industries and of other fundamentals. I find that the utility industry still shows a very rapid rate of growth. It is true that back in the decade of the Twenties, power output was growing at the accelerated pace of 130 per cent, while during the present decade the growth has been reduced to 30 per cent. This lessening of the growth curve may be disturbing at first glance to the utilities, but only until you look at some of the other leading industries. Steel tonnage during the earlier period averaged a net increase of 18 per cent and during the present period reflects a loss of 5 per cent.

Automobile output almost came up to the sharp growth curve of the utilities in the Twenties, but has since fallen way below. In fact, instead of an increased growth, automobile output is now declining 5 per cent. Railroad freight, of course, was already experiencing a slackening pace and reflected a growth of only 8 per cent. Today, freight handled by the carriers is down 28 per cent on a growth basis. Population figures also show a declining trend. So you see, the power industry can well be pleased with today's progress. It might well look into the future with reassurance.

Remember this, the markets for electric power are by no means even within hailing distance of the saturation point. In the United States today there are still approximately 12,000,000 wired homes without electrical refrigeration, 9,000,000 without vacuum cleaners, over 10,000,000 without washing machines. Only 1,300,000 out of the 6,300,000 farms in this country have been electrified. There still remains, therefore, a huge potential market.

WHAT are the utilities doing, not only to prepare for this vast potential market, but also to provide present users with increased power as they make further use of electricity? At present, very little. Many of the power producers have been so discouraged with the almost never-ending deluge of criticism emanating from the nation's capital, they have practically crawled into a hole. From 1925 through 1929 the industry spent at least \$750,000,000 each year on construction. In fact, in 1930 when Herbert Hoover called for heavy construction expenditures to stem the tide of depression, \$919,000,000 was spent. Soon after, the era of persecution started and the construction engineers were ordered to lie low. Expenditures reached a bottom of \$129,000,000 in 1933. The past two years the pace has



QUOTE *"FUNDS for financing municipally owned plants are not being poured out in the early New Deal fashion. Pressure groups are even making great strides in demanding honest accounting methods for the already existing municipal plants. In cases where the city has found it more advantageous to take over the privately owned power provider, the tendency has been to mediate for a 'fair price.'"*

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been upped, but it is still running well below the levels of the Twenties.

I will not deny that during 1929 and early 1930, the industry went far too long on the side of expansion. Power output was headed downward but yet new money continued to flow into construction. It was not a question of how soon would demand come up to the new construction, but how soon would the new construction be completed. Manufacturers of heavy electrical equipment have suffered grievously as a result of this overexpansion.

HOWEVER, the power output that many utility managers expected when they put up these mammoth plants is at last being called for. Even under present conditions the utility industry is operating at or around capacity. Some plants cannot stand an increased load very long without serious trouble. Yet, little is being done to build up additional capacity. It is true that many managements have continued their construction programs on a reduced scale and have kept up with the mounting demand curve. Other companies, however, have failed to provide even normal facilities in face of this ever-increasing power output.

Furthermore, business itself is not in an overexpansion area. You have to look back on the Babsonchart of Business Conditions at least ten years before you find a period of real overexpansion. Of course, we did have a good year of business in 1937. But during that year it was the inventories of consumers' goods that overexpanded, rather than any great expansion of plant or factories. Thus I say, from purely a business standpoint, utility executives should not be afraid

of running into any severe setback in business, such as they experienced when they were in the midst of the last construction boom.

It requires a great amount of courage to face the future in your industry with an open mind entirely free from fear. However, I strongly feel that if the large utility companies which are located in rapid growth areas will start a vigorous construction program they will reap big returns in coming years. By this suggestion, I do not mean they should undertake construction enough to take care of the next twenty years. That would be folly and costly. But I do feel that it is time now at least to think of the next five years.

THE growing demand of the next five years is not the only incentive to start construction work now. Prices of raw materials are definitely in a buying zone. This saving, due to the present low-price levels, is carried right down the line from raw materials to finished products. But that is not the only advantage of starting promptly. Many manufacturers are in a position to give special slack-period concessions to smart buyers. Furthermore, and this is a vitally important reason, when in history could you borrow money at any lower rates than are now available?

Some utility concerns are operating in territories where future growth is not likely. That is, although the demand from the present customers will continue to mount, yet the possibility of adding more customers is rather remote. Even in such a case, further expansion of the plant is also possible. This may be done through a thorough study of the rate structure. This is best

Incentive for Construction Work

"THE growing demand of the next five years is not the only incentive to start construction work now. Prices of raw materials are definitely in a buying zone. This saving, due to the present low price levels, is carried right down the line from raw materials to finished products. . . . Many manufacturers are in a position to give special slack-period concessions to smart buyers. Furthermore, and this is a vitally important reason, when in history could you borrow money at any lower rates than are now available?"



illustrated by the following example: A large unit in an eastern city was having considerable trouble from the press and city administration for lower rates. The firm called in an engineer. Much to their amazement, he recommended a rate cut of \$1,000,000. This was immediately turned down by the president as absurd. But the engineer went one step further. He claimed that in spite of the rate cut, the surplus of the company at the end of the year would increase. He finally convinced the powers that be; and the rate cut was announced.

At the end of the year, just as he had predicted, the surplus was larger. He recommended another rate cut for the next year of the same amount and also repeated his optimistic forecast about the surplus account. Much to the company's amazement those predictions were verified during the ensuing year.

In fact the company's business increased so fast it was obliged to put in more equipment; and the additional profits more than carried the load of the new construction.

OTHER utilities are also finding this same procedure profitable. There is a sharp distinction between voluntary reductions of rates and helpless yielding to political force. Usually it is bad business when rate structures are shattered by high-pressure politicians who are ignorant of commercial conditions. Such raids often fail to bring much permanent benefit to the consumer and their chief effect is to upset the power company. It is a different story with "incentive" rates; voluntary adjustments by experts familiar with business methods may help both the companies and their customers. Rates which are lowered in this manner tend to spur the sale of electrical appliances, build up load, and create new earning power.

Where a scientific rate structure is already in effect, consumption of electricity often can be increased without further rate revisions. The plan which many utilities are using is based upon aggressive marketing of electrical appliances. For example, we have been in touch with the successful campaign of a utility in the mountain states region. This company has specialized on

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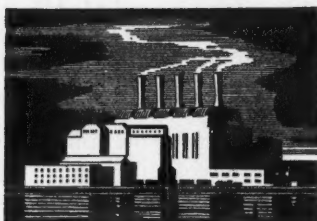
the distribution of water heaters among the homes of its customers. By well-planned and persistent salesmanship, the potential market for this type of appliance has been very highly developed. The proportion of water heaters which this company has placed in the region it serves is well above the national average. The results are extremely effective. Domestic power load has been built up well beyond normal expectations. This particular case is significant, because it indicates the immense opportunities within reach of the utility industry when it modernizes its methods of merchandising.

BEFORE closing this article, let me call to the readers' attention two important possible developments. Either one of these may materially brighten the public utility situation:

(1) The growth of air-conditioning—especially in the South. I am exceptionally well acquainted with our southern states, and believe that air-conditioning will do much for both the cities of the South, and for the utilities of the South. Furthermore, in a general way, this applies to the whole country. I have spent considerable time and money in trying out air-conditioning. I am not so enthusiastic about its uses in private homes as are many people; but I believe that almost all office buildings, hotels, and stores will need to be air-conditioned within ten years in order to earn money on the investment. Furthermore, the development of air-conditioning is bound to multiply, a hundredfold, the use of slow-moving, large, quiet fans. The possibilities of cooling through moving air, without refrigeration, have not yet been scratched.

(2) The possibility that the SEC will recommend to Congress that it be given discretion as to the *retroactive feature* of the "death sentence" clause of the Public Utility Act. So long as the utilities fought the SEC, there was no hope of bringing about a compromise. As, however, public utilities place themselves frankly in the hands of the SEC, they find it is a fair-minded and coöperative body. Of course, the SEC wants the utilities to unscramble by sitting about a conference table and swapping properties. To a certain extent the unscrambling can be accomplished in this way, but sooner or later both the SEC and the utilities may be up against a stone wall. I believe, *at that time*, the SEC will ask Congress to cut a hole in this wall.

I BELIEVE that the stage is set for further business expansion. Of course in the event of war in Europe, the utility interests in this country certainly would have to increase the size of their plants tremendously. But war or no war, it is time for utility executives to stop thinking along the lines of "deferment and postponement." Fundamentals are on the side of expansion. It is time now for utility leaders to forget Washington and the New Deal and take heart. By all means take immediate care of necessary maintenance. But that is not all; start drawing up plans for new construction. If the important utilities will start their needed construction programs, it might set off the spark for a tremendous revival in capital goods. Furthermore, it is this revival in the heavy industries of the country that would help the utilities increase their output greatly.



National Defense and Electric Power

Last September, President Roosevelt, sensitive to the fact that a continuous and ample electric power supply is among the primary needs of the national defense, appointed a National Defense Power Committee. The author of this article was named chairman. The purpose of this committee is to study the requirements of the country as a whole with respect to electric power under the possible pressure of emergency conditions, and to report upon and make recommendations concerning the condition of the national electric power reserves. This article is an informal description of the general progress of this committee's work, with special reference to the coöperation between the committee and the privately owned electric power industry of the United States.

By LOUIS A. JOHNSON

ASSISTANT SECRETARY OF WAR

THE Army has caught up with the machine age. It has come to recognize at last that training, courage, and discipline, though indispensable to military efficiency, offer no substitute for the modern engines of war that now threaten civilization. Battles may still be waged in "No Man's Land" but the key to ultimate success is found far behind the lines on the nation's industrial front.

In full recognition of that fact, the War Department has drawn up its industrial mobilization program. It provides for the full use and exploitation of our civilian factories for the production of the necessary munitions in case of a major war. Since factory production, in turn, must depend largely on the availability of power, and espe-

cially of electric power, the plan necessarily includes a consideration of this highly important utility.

During the World War the full significance of electric power was but faintly recognized. As a result, we overloaded a number of our electric power companies. The demand for munitions in such industrial areas as Buffalo, Philadelphia, and Pittsburgh resulted in very serious power shortages.

SUCH a situation the President is determined to avoid in case of another national emergency. To minimize the dangers of a shortage, he appointed a National Defense Power Committee on September 3, 1938, and honored me by naming me its chairman. He

NATIONAL DEFENSE AND ELECTRIC POWER

directed that our committee study the problems of electric power as related to national defense.

As soon as the organization of the committee was completed, we decided to begin with an industrial power survey. We asked the utilities to supply us with information in regard to their present capacity. We called upon them to estimate their future load growth. We requested their plans for capacity installations. Every utility that we addressed sent a committee from its executive and engineering staffs to Washington, at its own expense, to analyze the nature and the breakdown of the information desired. Within thirty days, the power industry met the desires of the War Department and the Federal Power Commission.

We then called the attention of utility executives in munitions centers to shortages in capacity and asked them to start at once on the construction of at least a million kilowatts of additional capacity. Their answer was prompt and wholehearted. Today, a capacity of approximately 900,000 kilowatts is ready for immediate installation, or on order, and there is every indication that we very soon will reach our million mark.

As part of our power program, we asked the utilities and the manufacturers of turbo-electric equipment to

standardize engineering machinery of each capacity. Again, industry fully cooperated. As a result, a document entitled, "Preferred Standards for Steam Turbine Generators of 10,000 Kilowatt Rating and Above," has been prepared and published and it has met with the enthusiastic commendation of the entire electric industry.

OUR power program required that we confer with experts on rates and that we have access to company records. The National Defense Power Committee sent out field parties. Wherever they went, they were cordially received. They were given free access to the necessary records. They were provided with stenographic and clerical help. They were offered engineering advice. The narrow bottleneck in power supply is slowly cracking and it is due to the wholehearted cooperation of the industry that we have moved forward.

In the field of power preparedness for emergency we have merely scratched the surface. There is still a great deal to be done. I trust that the power companies will continue to think in terms of national defense. Only in a full and intelligent distribution and utilization of our electric power facilities can we expect to achieve adequate preparedness.

"SPRING fashions in politics are as much distinguished by the bright colors of their 'isms' as by the major emphasis on party lines. And none of the current style accents is more significant than the variations issuing from interpretations of what constitutes 'liberalism.' For scarcely a day passes that some 'friend of the people' does not invoke, in the name of liberalism, more power for government."

—MERLE THORPE,
Editor, *Nation's Business*.



"Caveating" for "Emptors"

Taking the "beware" out of the old maxim,
"Let the buyer beware"

By NEIL M. CLARK

CAVEAT *emptor!* was the old-fashioned high-hat way of saying that a buyer who was sucker enough to get gyped in a horse trade had better take his loss and like it. Or bide his time and get even, if smart enough. He had no moral or legal recourse.

Probably no ethical change since the Golden Rule has been more revolutionary than casting *caveat emptor!* into the moral garbage can. In legitimate business it is no longer considered either decent or desirable to try to trick the buyer. People still do it, of course, in a sneaking sort of way, but only those caught in the backwaters of a social time-lag, not those in the main forward-moving current. Of the latter, some go so far in the opposite direction as to say that the buyer is always right.

Caveat emptor! was scrapped, not because human beings turned altruists overnight, but because the industrial revolution and machine production taught us to produce goods in quantities and of kinds never before dreamed

of—forced us to study merchandising as a science and a fine art, in order to sell all the new goods successfully—led to the discovery that confidence-in-the-seller is a better sales tool than trickery, and is conducive to repeat sales, on which modern business is mostly built. "For the first time in human history," as Walter Lippmann once put it, "men had come upon a way of producing wealth in which the good fortune of others multiplied their own." Legal theory and enactment are slowly catching up with enlightened practice. Those things which men at the head of the business procession do today because they find them profitable, all business men will do tomorrow because—well, because it's the universal custom *and* the law.

The above is by way of preface to the story of one of the greatest buyer-safeguarding institutions of our times, Underwriters' Laboratories, Inc. The experts of this institution *caveat* on a grand scale, you might say, in order that garden-variety *emptors* like John and Mary Smith may buy a vast variety

"CAVEATING" FOR "EMPTORS"

of goods with safety and assurance. It is not the only institution of its kind now. Others have sprung up to do in other fields somewhat the same sort of thing that it does. Buyer-need has fertilized the ground for these institutions, has made their growth steady and certain. UL was one of the first of them—today is doubtless the largest and most respected and influential; and its fortunes right from the outset have been tied up intimately with those of the public utility industry through manufacturers, distributors, and users of equipment and appliances.

CONSIDER for a moment just what the service of the Laboratories means to the aforesaid John and Mary, and just how it touches them. Take waffles. John Smith loves waffles. He could sit and eat them every blessed morning for breakfast, I guess, with syrup and a slab of country sausage; and he very nearly does. To say nothing of Sunday evening waffle suppers, and midnight waffle snacks that seem to be in order when Jones and his wife drop over for bridge.

Mary Smith has owned the same electric waffle iron for several years. It gives perfect service, produces golden-brown, crisp waffles of the hold-your-man variety. Now Mary doesn't realize it, but all these years she has been making her husband's waffles on a potentially deadly device.

How so? Well, the heating element is in two parts, one on top and the other on the bottom. The cord that carries the current is divided where it passes through the hinge on which the top part swings. During the lifetime of Mary's iron (it's not so new now, of course, as it was when it came to her

as a wedding present), the top has been lifted scores and hundreds of times. Every time it was lifted or lowered, there was friction on the cord at the hinge.

Has the insulation, during these years of use, worn through to the current-carrying wires? No. Have Mary's fingers ever felt the warning prick of an electric shock when making John's waffles? Never! Why not? Because Underwriters' Laboratories experts *caveated* diligently for the *emptor* of that waffle iron.

HERE'S what happened. The manufacturer of the iron wanted to be able to offer it to his customers bearing the label, "Underwriters' Laboratories approved." In the electrical industry (and several others as well) that label is so well established that the sale of appliances or products without it is almost impossible. So the manufacturer submitted a sample waffle iron to the Laboratories for test. And tested it was, heartlessly and ruthlessly, by experts who had no interest whatever in the waffle-iron business, who cared not at all whether that particular iron was good or bad. All they wanted to know was the facts. Was it safe for Mary Smith (for the millions of Mary Smiths) if Mary used it with considerable dumb carelessness over a period of many years? Would its parts wear too rapidly, allow current to escape somewhere, perhaps shock the waffle-maker severely, perhaps start a fire?

Mary, the experts knew, was bound to be careless occasionally. So they were careless. Or pretended to be. They devised tests that simulated rather exaggerated carelessness, as well as long use. One of the focal points of test, of

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course, was the insulation at the hinge. They wanted to know how many liftings and lowerings would wear it bare at that point.

They rigged up a device that could automatically lift and lower the top. They attached this particular waffle iron to the device, turned on the juice, went about their business elsewhere, and let the top lift and lower several thousand times. When they were satisfied that they had abused that waffle iron more, probably, than it ever would be abused in the hands of Mary Smith over a period of years, they examined it with defect-detective eyes—and were not satisfied. *This* was wrong, *that* was wrong. The insulation was pretty good, but not quite good enough; or maybe the hinge construction wasn't so good as it ought to be. Anyhow, they sent the iron back to the maker with a report of their adverse findings.

"No soap!" they said in substance; or more technically, "You can't use the Underwriters' label on this, as is."

WAS there any "out" for the manufacturer? Oh yes. He and his engineers studied the report, made some necessary changes in design and materials, submitted another sample with improvements incorporated. This one went through exactly the same rigorous use-tests. The improvements proved to be good enough. In other

words, the waffle iron now met the standards approved by these unbuyable experts, and the manufacturer was given the right to use the Underwriters' label, and to have that waffle iron listed as an approved appliance.

When Mary Smith bought her iron (or rather when it was bought by the friend who gave it to her), she did not dream of the elaborate precautions that had been taken in her behalf. Nevertheless, *she had the experience of safety of millions of other appliance buyers to give her confidence and assurance in the labeled product.* This confidence tended to lessen her resistance as a buyer. About the only buying questions that she had to debate with herself were these:

"Do I *need* an electric waffle iron? Do I *want* one badly enough to pay the price? Can I afford it?"

John's prodigious propensity for waffles was a chief deciding factor. In any case, her decision was not complicated by the additional query, "If I buy it, will it be safe to use it?" Her *caveating* had been done for her on that score far more thoroughly than she herself could have hoped to do it, by the manufacturer (with UL aid) as part of the routine of successful merchandising in this modern age.

UNDERWRITERS' Laboratories, Inc., is a far-reaching organization.



Q "UNDERWRITERS' Laboratories, Inc., is a social-protective agency peculiarly modern in conception and scope. Of course its essential purpose is to prevent losses in insurable properties, first by fire, next by theft or accident. Its selfish tie-up . . . is with the stock fire insurance companies. But in serving that master well, as it does, it also serves others very well, indeed."

"CAVEATING" FOR "EMPTORS"

There are branches in New York and San Francisco. Headquarters are in Chicago. The laboratory building in Chicago occupies some $3\frac{1}{2}$ acres of floor space, and has the reputation of being one of the finest examples of fire-resistant building construction anywhere on earth. It better be, considering the things the experts do inside. Turn a corner almost anywhere, and you may see a smocked and begoggled expert dropping a match light-heartedly into a gasoline drum, hoping that the patent fire extinguisher he is testing will do its stuff; or casually setting fire to waste soaked in oil for some pleasant project of his own. They try to burn things up, try to make things fail, test the point at which failure begins, test the time it takes a fire of a given intensity to destroy a given appliance.

Underwriters' Laboratories by charter is a nonprofit corporation. It is practically self-supporting, thanks to fees paid by manufacturers whose products are tested. It is sponsored by the stock fire insurance companies of the National Board of Fire Underwriters, and five main classes of materials are tested for fire-, theft-, and accident-safety, as follows:

1. Fire-retarding building materials;
2. Fire-fighting equipment;
3. Accident-prevention devices or systems;
4. Miscellaneous—almost anything in and about building construction that may harbor some life, fire, or accident hazard;
5. Burglary-, robbery-, and theft-prevention devices and systems.

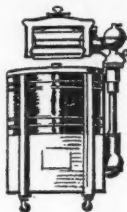
THE scope of the Laboratories' work is fourfold. First, the experts take the initiative in collaborating with all interested individuals, includ-

ing manufacturers, insurance company officials, and important users, in formulating standards for products. "How safe is 'safe'?" they ask. "How good is 'good'?" They set immediate standards as high as is practicable; and as time goes on they try to raise them and make "safe" safer, "good" better.

Second, they test new products by these standards. Waffle irons, and thousands of products besides. We'll come back for a closer look at some of the tests in a moment.

Third, they inspect production. Any product that carries the Underwriters' Laboratories label must not merely be up to standard once; it must keep up to standard. A large staff of traveling inspectors make tens of thousands of unannounced calls at factories throughout the year. They insist on choosing any samples they wish, for retest. There are some items, especially lamp and toaster cords, which inspectors often buy in stores or warehouses, perhaps after they have been lying around for some time, the object being to see whether shipping and storage have any serious effect on safety. Some of the inspection officers have trucks outfitted with simple testing apparatus for field tests. Incessant and unannounced inspection of actual commercial samples of approved products is the thing that puts teeth in the work of the Laboratories and gives the UL label real meaning.

Fourth, Laboratories' experts also conduct a certain amount of original research. They have published research bulletins, for example, on such subjects as "Fire Exposure Tests of Ordinary Wood Doors," "Opacity of Water to Radiant Heat Energy," "Spontaneous Ignition and Its Pre-



Retest of Electrical Appliances

“ANY product that carries the Underwriters’ Laboratories label must not merely be up to standard once; it must keep up to standard. A large staff of traveling inspectors make tens of thousands of unannounced calls at factories throughout the year. They insist on choosing any samples they wish, for retest. There are some items, especially lamp and toaster cords, which inspectors often buy in stores or warehouses . . . the object being to see whether shipping and storage have any serious effect on safety.”

vention,” “Control of Floating Dust in Terminal Grain Elevators,” and others with titles that sound laboriously abstruse to a layman, but which have helped to push the frontiers of knowledge a little further into outer darkness.

Now let’s glance hastily at some of the tests, since that is the spectacular part of the work, the part which chiefly occupies the eye on a visit to the premises. The basic idea of the tests, as I pointed out earlier, is to simulate conditions of actual use—decidedly careless or strenuous use, on the whole—and to examine the article afterwards for evidence of faulty design, construction, or materials. An appliance may receive the equivalent of ten years’ of use within a few hours or days.

I once stood open-mouthed and

looked at a door in a lonely corner of the laboratory which was busily opening and shutting, opening and shutting, hour after hour, with nobody near. There was something decidedly ghostly about it. It was a safety fire door, I learned, equipped with an automatic stop and a fuse that was supposed to burn out in case of fire, theoretically causing the door to close. The door was being tested. The object of the Goldberg-like gadget that operated the door in that ghostly fashion was to open and shut that door *100,000 times* (accounted the equivalent of ten years of use), so as to see what effect this much use would have on the fire-safety mechanism. If an article has any “bugs” in it, tests like this almost infallibly show them up.

If you visit the Laboratories on one of the burn-it-up days, you may be lucky enough to see the experts ear-

"CAVEATING" FOR "EMPTORS"

nestly trying to burn up fire doors, shutters, wall or roof sections, and many other things, either right out on the open floor, or in gas-fired furnaces that generate temperatures up to 3,000° Fahrenheit. If they are testing presumably fire-proof safes, you may see them drop a superheated safe three stories onto a pile of bricks, just to find out what would happen if that safe and its contents fell through the floor in a burning building. If they happen to be working on dusts or combustible gases and electric motors, you may see them pull a switch to activate a spark plug placed in some super-explosive mixture.

BUT you needn't run. They try things that look like invitations to disaster. But everything is under control. An accident or a fire where they don't want it is one of the rarest of occurrences in the Underwriters' Laboratories building.

You can walk all day through the various rooms and individual laboratories of this master institution without reaching the end of sights worth seeing. An item of special public utility interest is the test required to be given to all domestic and many industrial appliances designed for use on ordinary 110-volt current. First the appliance is put through a heat test. That is, the current is left on a long time continuously to see what happens. Does it become dangerously overheated? If you went off and left your radio on for a month, for example, would your house be just a pile of ashes when you got back?—of course, you know what your next-door neighbor's would be! Next, and immediately after the heat test, the appliance is sub-

jected for one minute to the enormous overload of a 900-volt current: that is approximately eight times as much current as it is supposed to take. It must take it, and the insulation must not break down; otherwise, no approval!

A favorite story at the Laboratories is about the woman who left her electric iron on the ironing board with the current on, and went away for a two weeks' visit. When she got back, the iron had charred its way right through the ironing board and the kitchen floor, and was hanging by the cord, the current still on, above the basement floor. There had been no fire because the appliance was UL approved and at no time did it generate enough heat to start one. As a matter of standardized routine, the experts had insisted that irons of that type, although built to get hot enough to *char* cloth and wood, must not *fire* it.

WALL switches, lamp sockets, and many industrial switches must stand up under 50 times of operation with an overload of 150 per cent; and after that, they must go through 6,000 cycles of operation at the rated current and voltage.

Gas stoves and ranges are set against a corner built of pine boards painted black and therefore extra heat-absorptive. The experts turn on all the burners on range or stove. The appliance cannot win Underwriters' approval if the temperature of the wood rises to a point above 194° Fahrenheit.

This gives a brief look at the day-by-day work in the testing rooms. Literally millions of articles have been tested. The years-long experience is that about 50 per cent of them fail to

PUBLIC UTILITIES FORTNIGHTLY

win approval on first submission; but about 75 per cent eventually win it, counting those that are sent back to manufacturers with defects reports, and then are altered and resubmitted.

Although not tied in exclusively with public utilities and the appliance industries, it is interesting that the origins of Underwriters' Laboratories, Inc., are closely connected with the early development of electricity for lighting and power. The introduction of electrical wiring into buildings brought to the fore all sorts of fire hazard questions. A young engineer who had been associated with the Boston Board of Fire Underwriters, William Henry Merrill, Jr., came to Chicago for the World's Columbian Exposition in 1893, and remained "out West" to serve as electrical expert for the Chicago Board of Fire Underwriters. It was Merrill's idea to open a testing station for materials. He did so, with the backing of \$350 appropriated by the National Board of Fire Underwriters.

FROM that tiny beginning, almost 50 years ago, grew the vast present organization. A recent search at headquarters showed that on the four lists of approved goods issued by Underwriters' Laboratories, there are approximately 15,000 separate *classes* of articles. On the electrical list alone,

which happens to be the largest, there are some 150,000 factory catalog numbers.

That is *caveating* for *emptors* with a vengeance!

Underwriters' Laboratories, Inc., is a social-protective agency peculiarly modern in conception and scope. Of course its essential purpose is to prevent losses in insurable properties, first by fire, next by theft or accident. Its selfish tie-up (if "selfish" is the correct word) is with the stock fire insurance companies. But in serving that master well, as it does, it also serves others very well, indeed. As we have seen, it makes life and property safer for all the Mary and John Smiths in the land. It makes selling easier for all the manufacturers of approved appliances. By facilitating the distribution of gas and electrical appliances, it makes for steadily increasing use of the services of public utility companies.

THE passing of *caveat emptor* underlies the whole thing. Mass selling depends on buyer confidence. We probably are no better, ethically and morally, than our horse-trading ancestors who habitually sold a spavined horse for the price of a good one if they could get away with it. But we live in a wholly different kind of economy. One of the a-b-c rules for merchandising success today is that

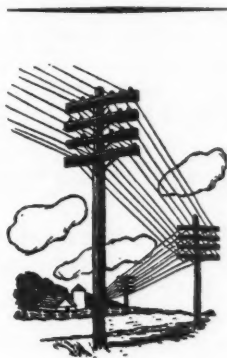


“UNDERWRITERS' Laboratories by charter is a nonprofit corporation. It is practically self-supporting, thanks to fees paid by manufacturers whose products are tested. It is sponsored by the stock fire insurance companies of the National Board of Fire Underwriters, and five main classes of materials are tested for fire-, theft-, and accident-safety, . . .”

"CAVEATING" FOR "EMPTORS"

sellers must go to great lengths in behalf of those ubiquitous buyers, John and Mary Smith. There are so many competing products on the market, that John and Mary do not have to buy yours—or yours, or yours—unless they are quite satisfied about it. The

UL label does not guarantee that any appliance will do everything that all buyers may expect of it. But the label does say, unequivocally, that in certain important aspects the appliance has been tried—and *not* found wanting.



A Nobel Prize Scientist Speaks on American Power Standards

"In this country (United States) there is now expended about 13.5 horsepower hours per day per capita—the equivalent of a hundred human slaves for each of us; in England the figure is 6.7, in Germany 6.9, in France 4.5, in Japan 1.8, in Russia 0.9, in China 0.5. In the last analysis this use of power is why our most important social changes have come about . . . This is why ten times as many boys and girls are in the high school today in the United States as were there in 1890 . . . This is why we have now an 8-hour day instead of, then, a 10-, a 12-, or sometimes a 14-hour day. This is why we have on the average an automobile for every family in the country. This is why the lowest class of male labor, i.e., unskilled labor, gets nearly twice as much in real wages in the United States as in England, three times as much as in Germany or France, and thirteen times as much as in Russia, and this is why the most abused class of labor in the world, domestic service, is even better off, relatively, in this country though completely unorganized, i.e., through the unhampered operation of economic laws, than in any other class of labor, skilled or unskilled."

—DR. ROBERT A. MILLIKAN
(N. P. '23, Physics).



Sixty Years of Electric Light And Electric Power

Anniversary of the birth of a mighty industry which
began with small plants, first in the West and then
in the East

By CHESTER MERRILL WITHINGTON
SECRETARY, EDISON PIONEERS

It is a matter of interest to the public utility industry as well as one of great satisfaction to its leaders that the two World's Fairs of 1939 should coincide with the sixtieth anniversary of the birth of the electric light and power industry. For without the marked progress in the latter over the last half century these great expositions, one in New York and the other in San Francisco, would not be possible. And, peculiarly enough, these two cities were responsible for the very start of the far-flung electric utility business of today.

Here in the East, Thomas Alva Edison, in 1879, was making progress in his varied experiments out of which was to come his broad-scope system of generation and distribution of electricity for Edison incandescent lamps. And in the same year The California

Electric Light Company started the first commercial central station in the world which, equipped with two Brush machines, supplied electric arc lights to a few customers with whom, it is related, "business proved profitable from the first month (September, 1879), twelve o'clock lights renting for \$10 per week."

The Brush installation had one machine of 5-arc lamp capacity and the other capable of supplying sufficient current for 16-arc lights. Before the end of that year the plant had been increased by two more machines, each with 16-arc light capacity. It is estimated that this earliest commercial central station during the three and a fraction months of its initial operation in 1879 grossed approximately \$3,400—thereby setting up the foundation of the industry's humble beginning.

SIXTY YEARS OF ELECTRIC LIGHT AND ELECTRIC POWER

Three years later to the month the first Edison commercial central station for incandescent lighting got under way in New York, the cornerstone, in the majority opinion, of the electric utility industry. Leading up to this event in September, 1882, there had been several years of experimental work on Edison's part, that dealing with the incandescent lamp dating back to 1877 and its perfection which occurred in October, 1879.

HOWEVER, in presenting something new for the record it is informative to go back to 1878, in which year the very first investment in equipment was recorded, the amount being \$35,000. It represented that year's sales by Telegraph Supply Company, succeeded the following year in name as the Brush Electric Light Company. Material represented by this purchase price was Brush equipment for arc-lighting equipment. In that same year, 1878, the Edison Electric Light Company was organized to promote and sell Edison central station equipment. By accepting in part payment of this equipment shares of licensee companies the Edison Electric Light Company became a holding company.

Thus, it may be recorded that the electric utility industry of today was made possible to a very great extent through this pioneer holding company formed sixty-one years ago.

There will never be unanimous opinion, in all probability, on the question of whose work actually gave the electric light and power industry its real start, although it is quite generally conceded that it was built largely around the many inventions contributed by Edison. Charles F. Brush, who

had studied mining engineering in his youth, forsook that calling for one in which he undertook to improve on Gramme's dynamo-electric machine which had just been demonstrated in Paris. And it was through this decision that the world was given its first commercial dynamo and arc-lighting system.

BRUSH early took credit for his part in a magazine article appearing in May, 1905, in which he wrote that his inventions of a "modern series arc light with its regulating shunt coil (making) the arc light for central stations a commercial possibility . . . may justly be regarded as marking the birth of the electric light industry as it exists today."

So far as the records show, Edison never took out time from his laboratory endeavors to take issue with the contention of his contemporary. However, through the medium of a bulletin issued by the Edison Electric Light Company nearly twenty years earlier, the moot question of the incandescent lamp's origin caused the official statement that

it never was claimed that Edison was the first man to invent an incandescent electric lamp, but that he was the first who made one that was a practical and commercial success.

To the writer, who has pored over many records in the past ten or twelve years for the purpose of bringing to light some of the unpublished and hidden accounts of the very earliest developments leading up to today's \$13,000,000,000 electric light and power industry, it is remarkable that such order was brought out of the chaos and cut-throat competition which sur-

PUBLIC UTILITIES FORTNIGHTLY

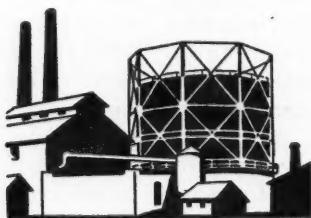
rounded the business at the start and continued through so many years. Furthermore, it became quite evident in this research that financing was difficult, especially among those communities which eventually were to become the home of several different systems of lighting.

AND from the very start holding companies had become absolutely essential in order to accomplish results and to make possible the financing necessary to secure plant and equipment for operation. Financial heartbreaks were as frequent as success.

Not until the era of consolidations

developed along with progress in improving old and inventing new equipment and methods did the electric light and power industry itself begin to show as a whole that the groundwork had been well laid for what eventually was to prove of world-wide benefit to all.

And with this steady improvement, which has continued up to the moment from those small beginnings sixty years ago, there has been developed an Art without which neither the New York World's Fair nor the Exposition at San Francisco could have attained the triumph that is sure to come to each of them.



The Rise of Gas-made Power

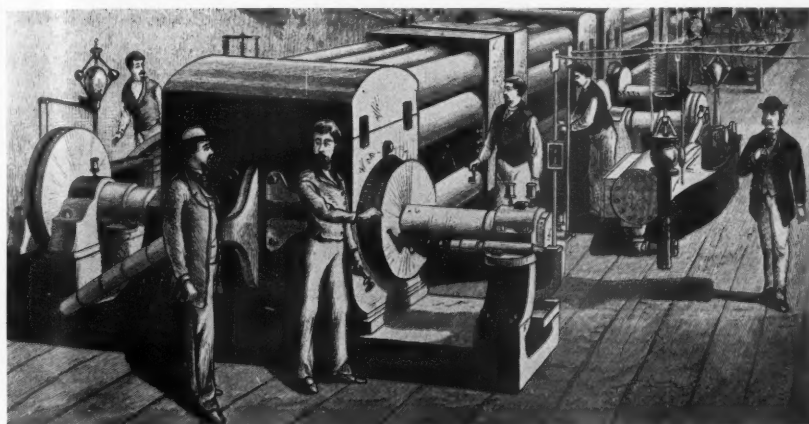
FIGURES recently released by the American Gas Association reveal the fact that one-ninth of all the electricity generated in the United States is developed by burning gas—or, in other words, 11 per cent of the national electric load, if traced back to ultimate sources of energy, is actually a gas load. Statistically stated, some 172,500,000 cubic feet of natural gas (averaging 1,100 B.T.U. of heating value per cubic foot) were sold for electric generation in steam-power plants during 1938. By standard methods of computation, this would indicate that gas generated about 12,650,000,000 kilowatt hours of electrical energy, which is 11 per cent of the total kilowatt hours of electrical energy produced in 1938, according to estimates of the Edison Electric Institute.

A simpler way of stating it, however, would be to say that every ninth electric light bulb, motor, vacuum cleaner, or street car is operated on gas.

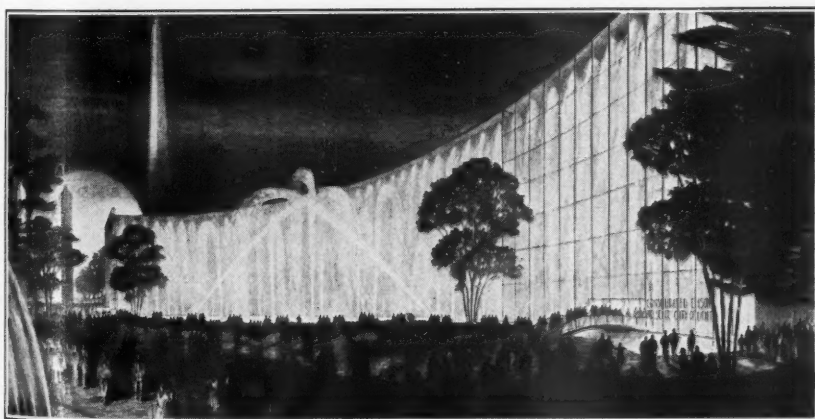
The Cavalcade of Power



A graphic factual survey of the status and accomplishments of the electric light and power industry in the United States.



A sketch of the interior of the old Pearl Street Station, New York city;—world's first sizeable commercial central electric station for public use. Opened by Thomas A. Edison in 1882.



A world's wonder of today in scenic lighting effect in the "water ballet" façade before the Consolidated Edison system exhibit at the New York World's Fair of 1939.

THE CAVALCADE OF POWER

I. The Birth and Growth of Power in America.

SIXTY years ago in a small shop at Menlo Park, N. J., Thomas Edison invented the first electric light bulb. That day, October 21, 1879, marked the real beginning of the electric power business as a practical industry. It was not until 1882 that Edison was able to open the first commercial power station for public service in Pearl street, New York city.

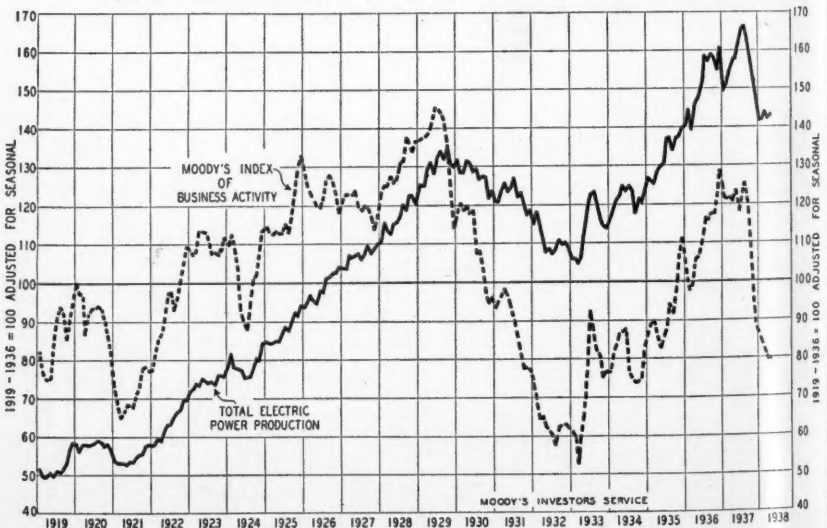
Compared with other so-called public utilities, electric power is still a baby. Public gas service for lighting and cooking began in Europe nearly 150 years ago. The steam locomotive arrived shortly before our Declaration of Independence, while the steamboat followed it very closely. Water distribution and drainage systems have been operated for centuries in the old world. The telegraph appeared before the Civil War; even the telephone had been patented by Bell in Washington three years before Edison's light bulb gave its first flicker. Only two

major utility forms—airplane and radio, both developed since the turn of the twentieth century—can be called younger than electric power as commercial industries. City transit, which began with the street car in 1887, was largely developed and associated with the electrical power industry itself.

What has the electric power industry in the United States done with its three-score years of commercial life? How does it compare with other utilities, with other industries, with the growth of the electric power industry in leading foreign countries? The accompanying charts show these facts more accurately than words could tell. They show clearly that the American power industry has outstripped its older utility brethren in the steady growth of comparable investment. It has made such progress in its own field that it has become the wonder of the world and the envy of industry abroad.

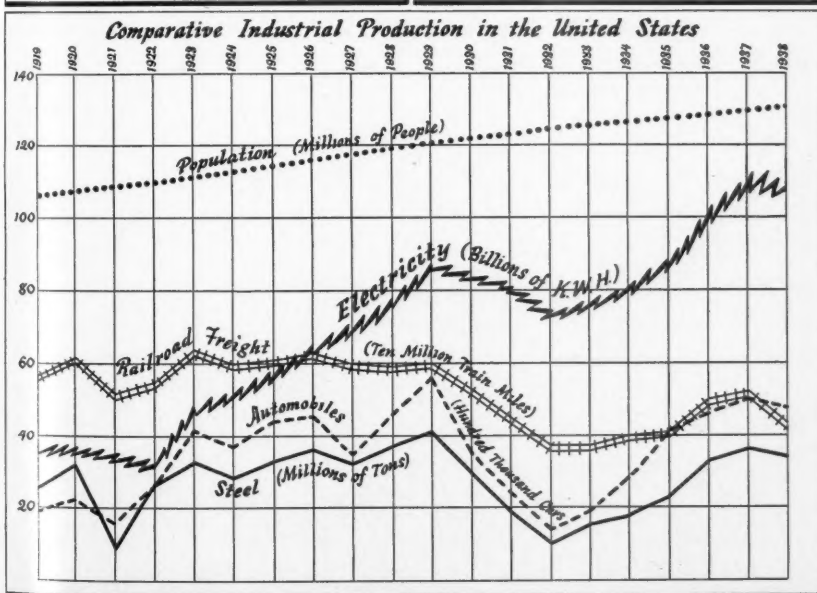
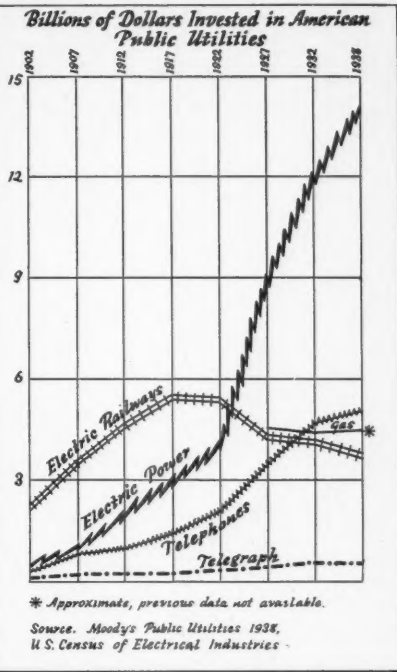
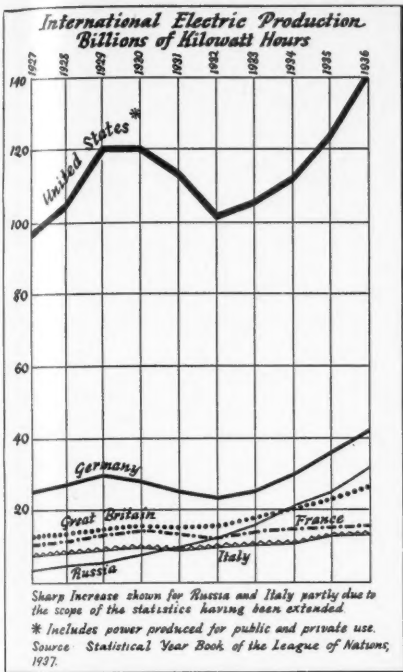


RELATIVE EXPANSION OF POWER AND GENERAL BUSINESS



NOTE: Because of the different scales used, it should be noted that the percentage rise in electric power production is much greater than that of business during the period 1919-1929. (Reproduced by permission of the publishers of "Moody's Public Utilities, 1938.")

THE CAVALCADE OF POWER



THE CAVALCADE OF POWER

II. How Has the Power Industry Treated Its Customers?

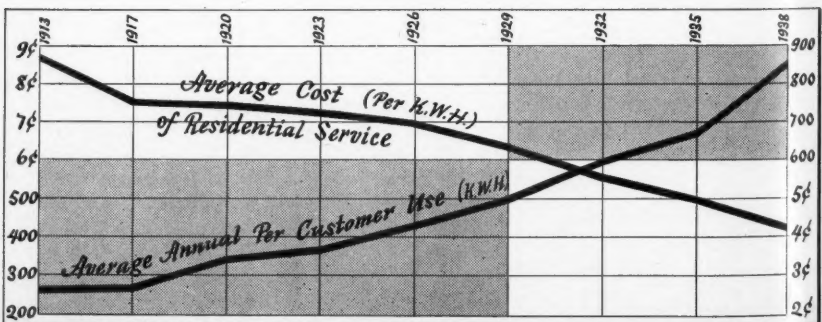
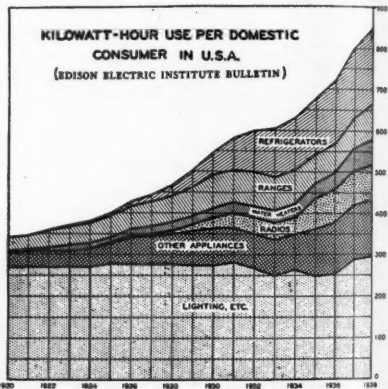
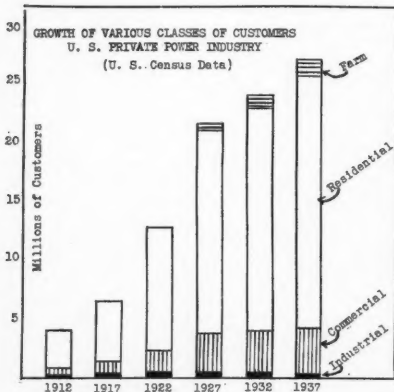
IF the Recording Angel were to ring the doorbell of the average American home and ask the lady of the house to name, in the order of importance, those material things which were most precious for her family's existence and comfort, electricity would rank high indeed. Food, clothing, and shelter would, of course, come first since they are the primary needs of human existence. Electricity, the modern Aladdin's slave of the button switch, would probably come next. Yet a mere threescore years ago it was an unknown thing.

This so-called "elimination value" (or, what-would-you-rather-do-without?) is the true test of public necessity for any service or commodity; not how much or

how little the customer pays for it. The American public voluntarily pays every year far more for some products, such as entertainment, tobacco, cosmetics, etc., which are luxuries, or semiluxuries, than it pays for some things, such as fuel or water service, which are essential to human life.

However, just by way of comparison, consider this record over the last quarter of a century: How much has the housewife had to pay for the service of this willing slave as compared with the cost of other primary needs—food, clothing, and shelter? The charts tell the story quickly and graphically.

The slave has been constantly demanding *longer hours and less pay*.



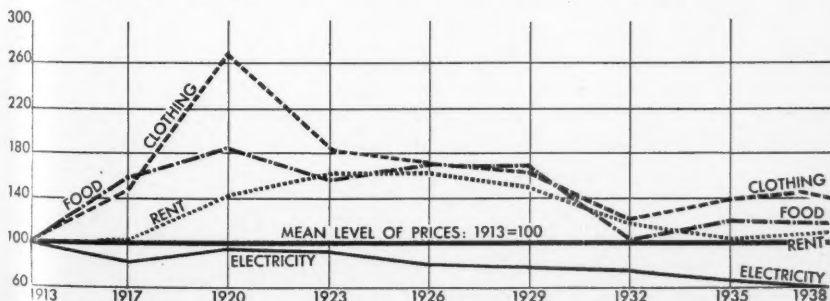
THE CAVALCADE OF POWER

WHAT YOUR DOLLAR BUYS

A Quarter Century Trend in Electric
And Living Costs



Each symbol represents 10 percent of what your dollar bought in 1913



Basic Source Data: U.S. Bureau of Labor Statistics

THE CAVALCADE OF POWER

III. How Has the Power Industry Treated Its Employees?

WORKING people the world over, whether in white collars or overalls, will readily agree on the three most desirable features of a job: (1) steady employment, (2) fair wages, (3) reasonable working conditions. The power industry is the employer of well over a half million men and women in the United States and meets all three of these tests with flying colors.

(1) Steady employment is provided by very reason of the fact that electric service is just one of those things that people can no longer do without in their everyday life. In winter and summer, rain or shine, good times and depression, the nation goes right on using its electric service. There is, of course, a certain amount of variation in electric utility operations, but it is small in comparison with the seasonal pick-ups, shutdowns, and lay-offs in other lines of work. On the whole, the electric business gives to its workers continuous employment, not only throughout the year, but over the span of years as well.

(2) As of February, 1939, the general average weekly pay envelope of the electric utility employee was just \$33.87. For this, the worker put in a general average of less than forty hours a week. These are high standards, indeed, compared with other industries. The electric

business ranks second only to the petroleum business in the accompanying list of leading industries, according to data assembled by the U. S. Bureau of Labor Statistics. These standards were already so high, that the electrical industry was not even affected, to any appreciable extent, by the U. S. Fair Labor Standards Act of 1938, which establishes minimum wages and maximum hours in all lines of industry for the relief of underpaid and overworked employees.

(3) Good working conditions mean that the employer has made an effort to lighten the task of his employees, aside from the matters of wages and hours. Some work, by its very nature, is more congenial and the surroundings more comfortable than other lines of employment. The electric utility industry has always been noted for its interest in the lot of its employees. Long before the passage of the Social Security Act of 1935, various electric companies had voluntarily established pension plans for the retirement of their aged employees. Of course, such provision is now made compulsory by Federal law in all lines of industry. In the matter of vacations with pay, for example, the electric industry ranks third in the accompanying list of industries, according to recently assembled official figures.



EXTENT OF INDUSTRIAL VACATIONS WITH PAY, 1937

<i>Industrial Group</i>	<i>Percentage Workers with Pd. Vacation</i>	<i>Industrial Group</i>	<i>Percentage Workers with Pd. Vacation</i>
1. Telephone and telegraph ...	99.8	8. All durable goods, manufacturing industries	46.9
2. Brokerage and insurance ...	99.4	9. All nondurable goods, manufacturing industries	31.5
3. Electric and mfg. gas	94.1	10. Laundry, dyeing, cleaning ...	28.0
4. Retail trade	88.2	11. Metallic mining	26.9
5. Petroleum products	86.1	12. Coal mining .....	.9
6. Wholesale trade	82.9		
7. Hotels and restaurants	63.6		

Source: Data furnished by U. S. Bureau of Labor Statistics.

THE CAVALCADE OF POWER

AVERAGE WEEKLY EARNINGS OF EMPLOYEES OF VARIOUS INDUSTRIAL GROUPS (FEBRUARY, 1939)

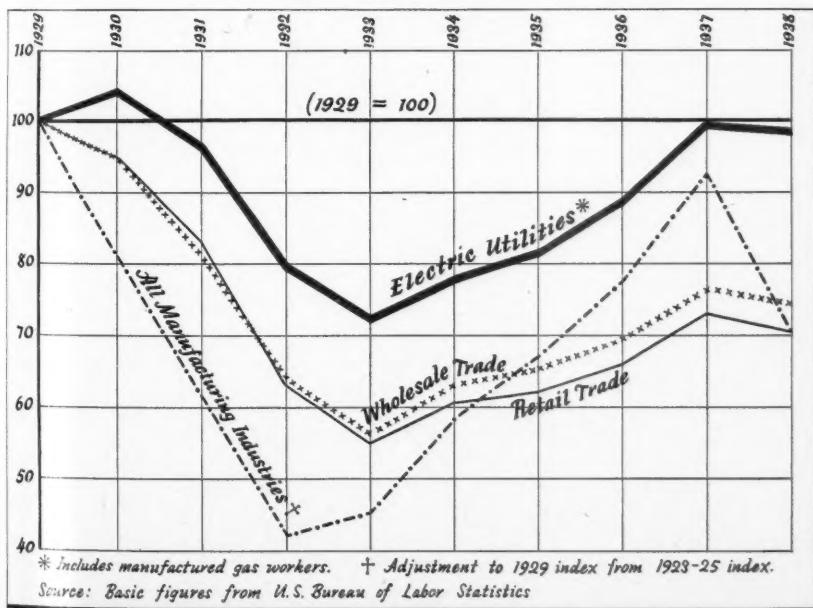
Industrial Group	Weekly Earnings Average	Industrial Group	Weekly Earnings Average
1. Petroleum production	\$35.01	14. Coal mining	\$26.27
2. Electric light and power	33.87	15. Nonferrous metals (silver-ware, jewelry, aluminum) ...	25.45
3. Electric railway and bus	32.87	16. Food products	24.80
4. Telephone and telegraph	31.09	17. Stone, clay, and glass products	23.41
5. Transportation equipment	30.69	18. Retail trade	21.55
6. Wholesale trade	29.54	19. Leather goods	20.34
7. Chemical products	28.47	20. Lumber	19.80
8. Paper and printing	27.89	21. Quarrying	19.69
9. Building construction	27.38	22. Laundries and dyeing	18.13
10. Metal mining	27.38	23. Textiles	17.32
11. Machinery, not including transportation	27.31	24. Hotels and restaurants	15.29
12. Rubber goods	27.28	25. Tobacco manufacturing	15.20
13. Iron and steel products	26.68		

Source: Data from U. S. Bureau of Labor Statistics.



COMPARISON OF INDUSTRIAL PAYROLLS 1929-1938

The relative stability of employee compensation through recent years, as shown by the average annual payroll records of leading American industrial groups



THE CAVALCADE OF POWER

IV. How Has Power Treated Its Investors?

BECAUSE it renders an essential public service, bonds of the electric industry have long been a favorite investment for insurance companies and other institutions having large sums of money entrusted to them for safe, yet moderately profitable, usage. Throughout the long depression, the bonds and preferred stocks of the operating power industry continued to yield their obligations with few exceptions during a period when other industries were plagued with widespread bankruptcy and receivership. Eighteen per cent of all insurance company investment is in utility bonds.

Probably the most outstanding feature of the economic strength of the electric

power industry is its ability to maintain its general upward trend in revenues, in spite of rapidly rising operating expenses, and continuous rate reductions. Higher taxes, higher payrolls, and higher cost of raw materials every year take a heavier and heavier toll out of the industry's cash register before it can begin to reward its investors. At the same time, lower rates for service tend to block the flow of revenue before it even reaches the cashier's window. Yet skillful management and good salesmanship have so far been able to produce enough additional business to keep the industry's essential earning power intact. Note below wide division of corporate control.

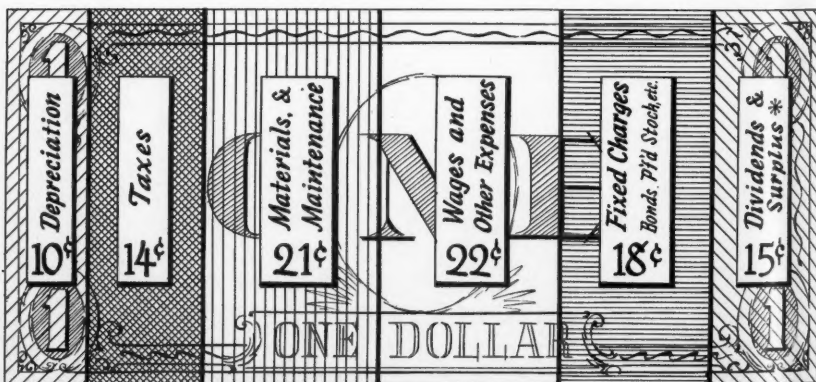
Corporate Control of Electric Power Industry	Per cent Energy Sold
Electric Bond & Share group	10.4%
Commonwealth & Southern group	7.2
Niagara & Hudson Power group	6.9
Consolidated Edison (New York)	5.8
Commonwealth Edison (Chicago)	5.4
North American group	5.4
American Gas & Electric group	5.1
Standard Gas & Electric group	4.7
Pacific Gas & Electric group	4.0
Associated Gas & Electric group	3.9
Philadelphia Electric	3.2
Detroit Edison	3.0
Middle West group	2.6
Public Service of New Jersey	2.4
American Water Works group	2.4
Southern California Edison	2.3

Corporate Control of Electric Power Industry	Per cent Energy Sold
New England Power Association	2.0
Cities Service group	1.9
Midland United group	1.7
United Light & Power group	1.7
Consolidated Gas (Baltimore)	1.3
Columbia Gas & Electric (Cincinnati) ...	1.3
Edison Electric Illuminating Company ...	1.0
New England Public Service group ...	1.0
Puget Sound Power & Light .....	.9
Connecticut Light & Power .....	.7
Portland General Electric .....	.6
Virginia Electric & Power .....	.5
Small miscellaneous	5.0
Municipal electric systems	5.7
Total	100%

Source: *Electric Light and Power Magazine*, June, 1937.



HOW THE POWER INDUSTRY'S REVENUE DOLLAR IS SPENT

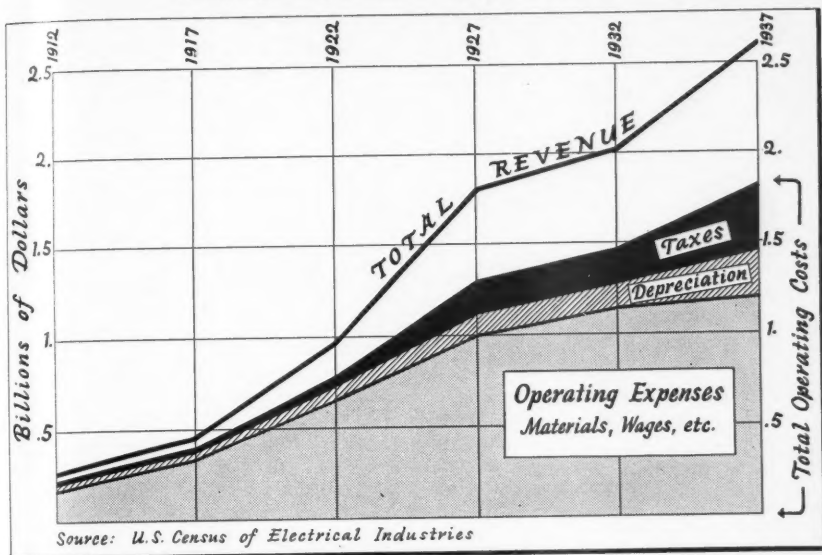


* A return of about 2 3/4% on plant investment.

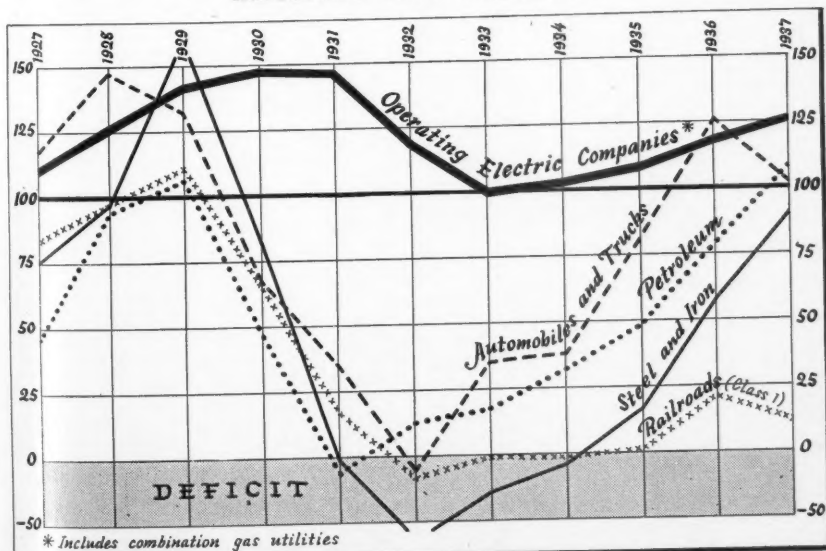
Source: U.S. Census of Electrical Industries 1937

THE CAVALCADE OF POWER

QUARTER CENTURY TREND IN THE REVENUES AND EXPENSES OF THE ELECTRIC LIGHT AND POWER INDUSTRY



RECORD OF CORPORATE NET EARNINGS OF LEADING AMERICAN INDUSTRIAL GROUPS (1926=100)



Source: Adjusted from earnings data compiled by Standard Statistics, Inc.

THE CAVALCADE OF POWER

V. The Power Industry As a Taxpayer
And Consumer.

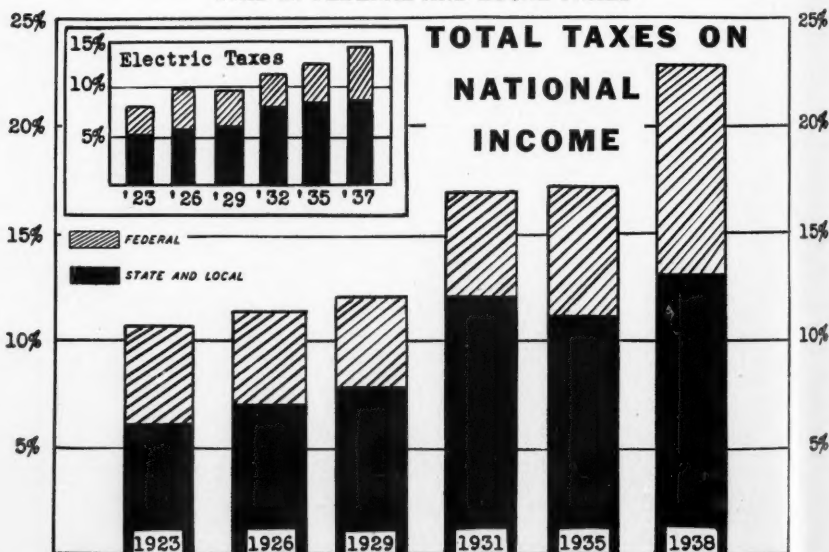
BACK in 1923, government tax collectors took a little more than 10 cents out of the average dollar of American income. Slightly over 4 cents went to the Federal government, while about 6 cents went to the state and local governments. The national debt at that time was about \$20,000,000,000. During the last fifteen years, both the national debt and the cost of government have more than doubled. Today over 22 cents are taken out of the average dollar of American income in the form of taxes: over 9 cents to the Federal government and 13.5 cents to state and local governments.

These taxes are collected from the American people in both direct and indirect form. The electric industry has been pressed into service more and more as an indirect tax collector. In 1923, it paid over 8 cents out of every dollar it took in to the tax collector. In 1937, it paid over 14 cents out of every dollar.

Yet the price of electricity to the consumer has continued to go down during the period of steady rise in the cost of government.

The electric industry is an important figure in American economy—not only as tax collector, but as a large-scale consumer of the products of other industries. This follows from the fact that the electric business requires such a tremendous plant investment. To produce a single dollar of annual gross income, the electric industry has to spend nearly six dollars for machinery, equipment, and other property. This naturally helps business and employment in other industries. Even after it has once set up its plant, that portion of the electric industry which uses fuel rather than water power to generate electricity continues to give great patronage to other lines of business as a result of its large purchases of coal, oil, and natural gas.

PERCENTAGE OF NATIONAL INCOME AND ELECTRIC UTILITY INCOME
PAID IN FEDERAL AND LOCAL TAXES



Source: "Taxation and Capital Investment," Brookings Institution, 1939.

THE CAVALCADE OF POWER

WHAT TAXES PAID by the ELECTRIC UTILITY INDUSTRY WOULD DO.

Total Taxes Paid in 1937
\$359,603,642.
According to U.S. Census

OR
More than pay year's appropriation for the
U.S. ARMY



Fiscal 1937

OR
Pay 3/4 year's appropriation for the
U.S. NAVY



Fiscal 1937

OR
Pay 70% appropriation Regular Depts. of
U.S. GOVERNMENT



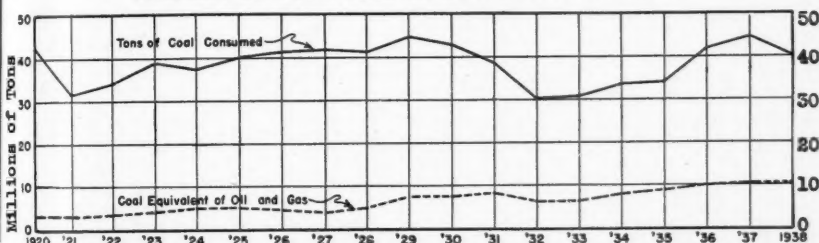
Fiscal 1937

OR
Pay almost 1/5 annual cost whole nation's system
PUBLIC SCHOOLS

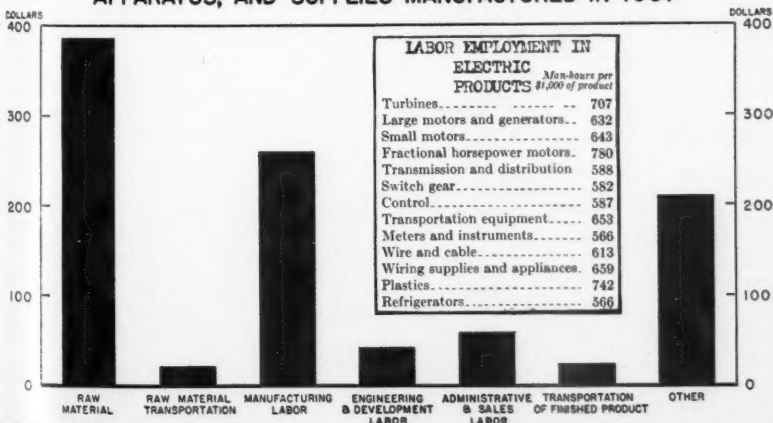


Elementary 1936

AMOUNT OF FUEL USED IN POWER PRODUCTION



DISTRIBUTION PER \$1,000 EXPENDED FOR ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES MANUFACTURED IN 1937



THE CAVALCADE OF POWER

VI. The Public Relations of Power.

EVERY nation in every age of history has some principal claim to fame—some contribution to the enrichment of human existence. Ancient Greece boasted of her wise men, ancient Rome of her warriors. Later European countries can brag of their marvelous development in the cultural arts. England is justly proud of her golden Victorian age of statesmen and empire builders.

What is America's contribution? What has made the United States the richest nation, with the highest standards of living in the world? The answer must point to the accomplishments of private enterprise, in which the electric industry has played a major part. America's claim to fame rests on a highly mechanized capitalistic system—the joint production of business leadership and American Labor—which gives the modern American citizen all the things he has or hopes to have. It has distributed wealth for comfortable living more plentifully to the people who created that wealth than any other system in history. This was not the work of kings nor of dictators, nor the product of any one mind or master plan. It is simply American business.

During recent years, however, American business has met with a surprising amount of criticism. Its mistakes have been magnified; its limitations have been emphasized. It has been blamed for economic misfortunes which have visited every nation in the world during the last decade. The electric power industry has received its share of this baptism of fire. Its leadership has been cross-examined.

However, there is unmistakable evidence that the power industry, like other major branches of American business, is well surviving this ordeal. The rise and slackening of the public ownership movement in the United States during the last six years indicate that the basic confidence of the American people in private enterprise has not been destroyed. Notwithstanding the attraction of generous loans and outright grants from the Federal Treasury, the proportion of municipalities approving proposals to put local governments into competition with private electric utility companies has passed its peak, as shown in the list below. Even in the national Congress, there is a growing disposition to taper off the vast Federal spending program which has resulted in establishment of large Federal power projects such as the Tennessee Valley Authority, and the Columbia river developments in the Pacific Northwest.

Those projects already authorized will, of course, be completed; but their total ultimate investment for power purposes will still be only a small fraction of the nation's private investment in electric power. Furthermore, recent amicable negotiations between the TVA and private power companies in the TVA area give reason to believe that competitive problems growing out of the Federal program will sooner or later be worked out satisfactorily. Then, both the private industry and the public agencies for wholesale power supply will be able to flourish side by side without friction.

	NUMBER OF ELECTIONS HELD		
	For M. O.	Against M. O.	Total
1933	78	70.3%	33
1934	58	55.3	47
1935	66	60.0	44
1936	49	38.6	78
1937	43	44.3	54
1938	108	50.7	105
	402	361	763

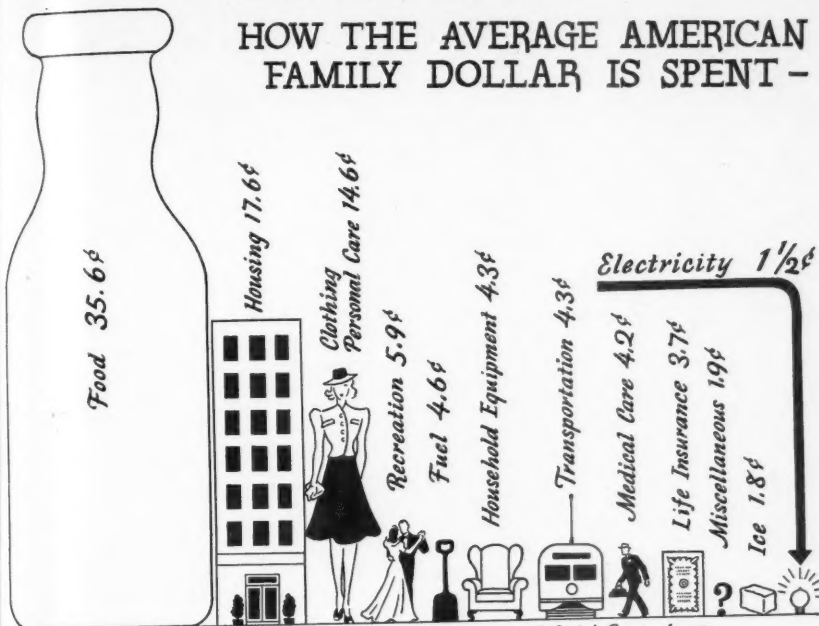


	RESULTS WEIGHTED BY POPULATION		
	For M. O.	Against M. O.	Total
1933..	4,595,096	70.5%	1,924,509
1934..	3,904,134	63.3	2,251,362
1935..	720,075	58.5	589,707
1936..	1,572,697	27.4	4,162,188
1937..	334,562	11.4	2,605,458
1938..	510,744	36.1	906,192
	11,637,308		12,439,416

Source: Address of Managing Director, *EEL Bulletin*, April, 1939. N. B.: On May 19, 1939, voters of San Francisco defeated a municipal ownership proposal 121,895 to 49,843.

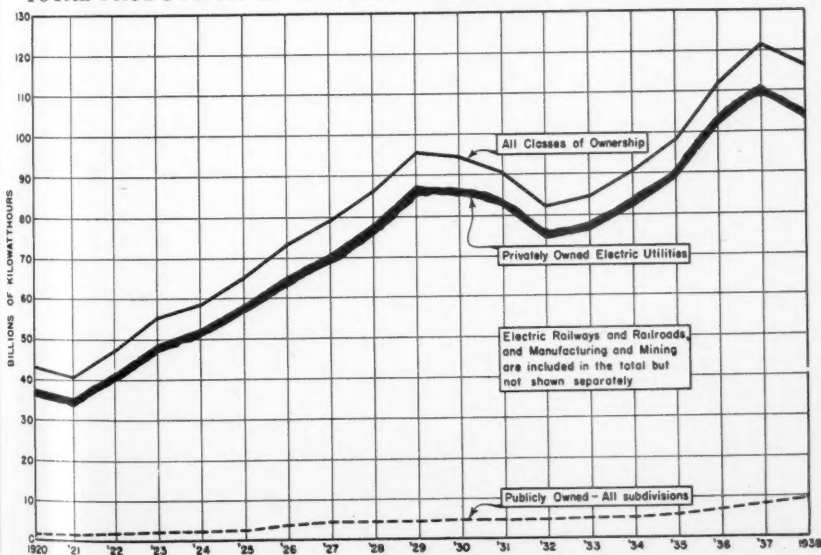
THE CAVALCADE OF POWER

HOW THE AVERAGE AMERICAN FAMILY DOLLAR IS SPENT -



Source: "Intercity Differences in Costs of Living," By WPA, Division of Social Research, 1937.
Based upon a study of household budget expenditures for a four person family in 59 selected cities as of March, 1935.

TOTAL PRODUCTION OF ELECTRIC ENERGY BY CLASS OF OWNERSHIP



—From "Electric Power Statistics, 1938," published by Federal Power Commission.

THE CAVALCADE OF POWER

VII. Power and the National Interest.

WHEN Christopher Columbus discovered the New World in 1492, he first landed on the fringe of the eastern coast of the American continent. For purposes of water power development, this discovery of America took place on the wrong side of the continent, although, of course, the great Columbus had no way of foreseeing that. Yet the fact remains that 70 per cent of the practically usable water power of the United States is located in the mountainous country west of the Mississippi river, while 70 per cent of the demand for electric power is located east of the Mississippi river, because the country grew up that way from the coastal points where the white men first settled.

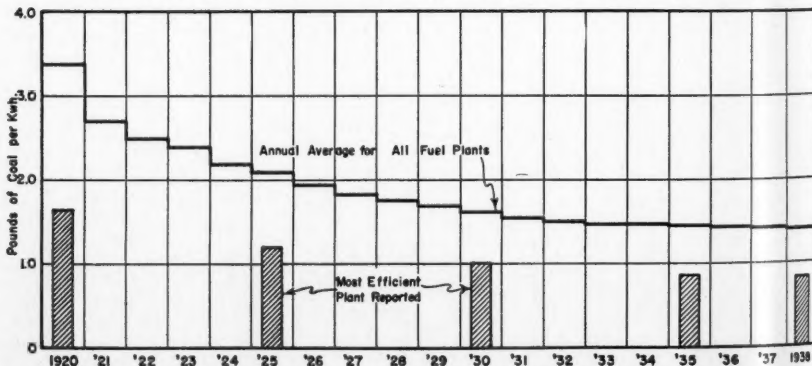
Fortunately, nature located another great source for making electric energy for the densely populated eastern half of America—in the form of huge coal deposits. So cunning has been the improvement in generating equipment that today it takes an average of less than a pound and a half of coal to produce one kilowatt hour of electricity. Fifty years ago, it would have taken from fifteen to twenty pounds of coal. Even further economies are likely in the future of fuel-generated power. For this reason, power can now often be made as cheaply with fuel as with water power. The

East is at no great disadvantage as compared with the West.

True, the use of coal consumes a natural resource which cannot be replaced. However, the known coal reserves at the present rates of usage can last over 4,000 years. Even if we used coal to supply all of our energy requirements, these reserves would last some 2,000 years.

This balance of the country's power reserves is of great importance to the public—not only as a matter of supplying the needs of everyday electric consumption, but in case of emergencies, such as might arise in a national defense crisis. Through a system of interconnected lines, the relatively small and less expensive fuel generating stations are available at close hand to supply the densely populated eastern seaboard. If needs be, they can also help in replacing the larger and much more expensive hydro projects, which are usually located in exposed places and so constructed as to make them more vulnerable to unforeseen damage or even hostile destruction. The Assistant Secretary of War has recently acknowledged the valuable co-operation of the electric power industry in building up a system for making safe power reserves available in case of emergency.

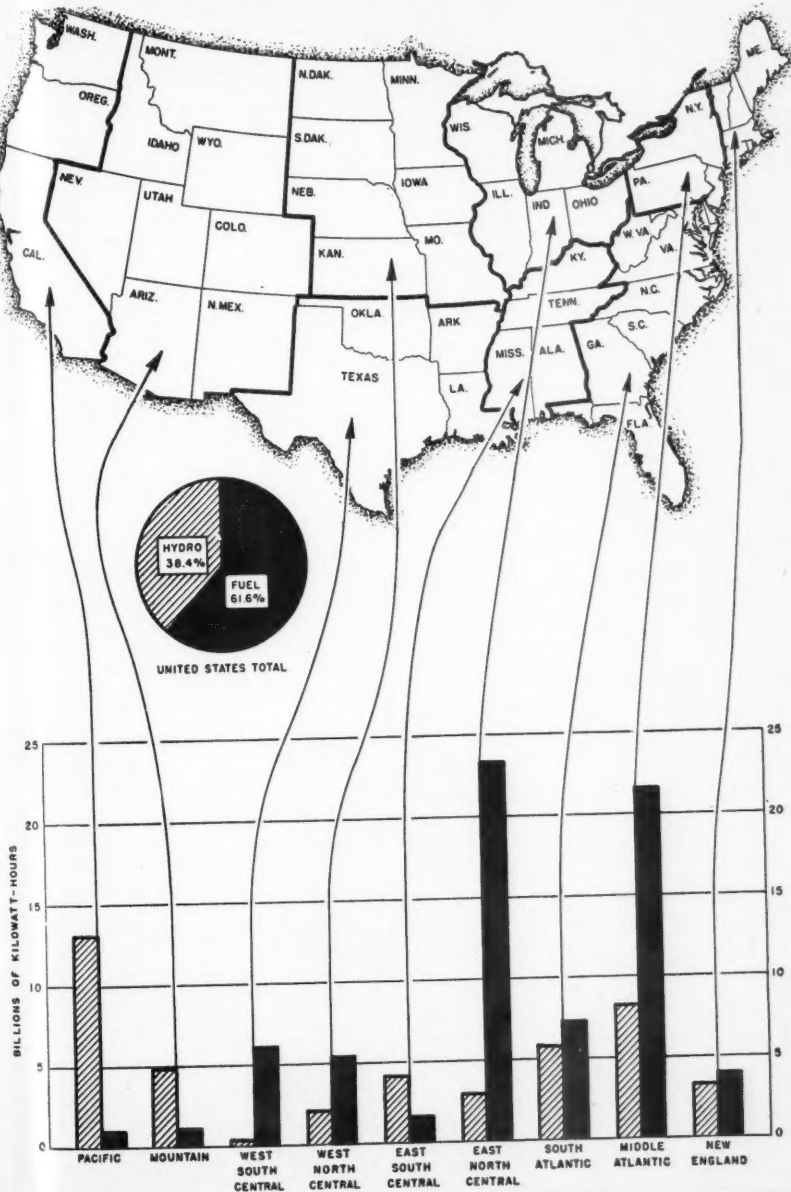
INCREASING EFFICIENCY OF POWER GENERATION BY FUEL



—From "Electric Power Statistics, 1938," published by Federal Power Commission.

THE CAVALCADE OF POWER

PRODUCTION OF ELECTRICITY BY FUEL AND WATER POWER



—From "Electric Power Statistics, 1938," published by the Federal Power Commission.

THE CAVALCADE OF POWER

VIII. The Power Industry and the Farmer.

ACCORDING to a recent census of the U. S. Department of Agriculture, there are 6,422,088 farms in the United States. Of these, only 4,328,092 farms had houses on them that were worth over \$500. It is clear that a farm with a house not worth more than \$500 is not as good a prospect for electricity as a farm with a more valuable dwelling.

Also, there are a considerable number of farms which are located in out-of-the-way places where houses are so few and far between that building power lines to serve them comes quite expensive for ordinary use of power. Some of these remote farms make their own power with home generating plants. In any event, for these reasons, probably not more than two out of three of all farms in the United States can be fairly considered as likely customers under any reasonable circumstance. And of these farms, about one-third of them have been connected already to electric power lines.

In other words, over 32 per cent of the farms in the United States which have homes valued at more than \$500 are now receiving regular electric service, and

about 22 per cent of all farms in the United States, regardless of the value of their dwellings, are connected with electric utility lines.

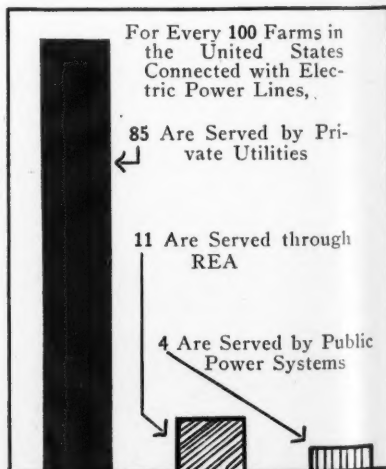
This leaves a pretty fair-sized farm population still without electric service. But the accompanying table shows that rural electricity has progressed rapidly. Only twenty years ago, there were 100,000 farms electrified throughout the entire United States. Today the number is approaching a million and a half. The bulk of this progress has been made by the privately owned electric industry in the United States, because the public plants, being mostly operated by municipal governments, have been limited by legal and other restrictions from carrying the power outside of their city limits to the farmer. More recently, the Federal government, through the Rural Electrification Authority, has encouraged the work of rural electrification through rural nonprofit associations of the farmers themselves. The illustration shows the approximate amount of rural electrification by private industry, municipally owned power plants, and the REA lines, as of December, 1938.

GROWTH OF RURAL ELECTRIFICATION

Year	Total Number Farms	Total Farms Electrified†
1919	6,448,343	100,000
1924	6,371,640	204,780
1930	5,954,194	649,919
1931	6,071,167	698,786
1932	6,188,144	709,449
1933	6,305,119	713,558
1934	6,422,088	743,954
1935	6,422,088*	788,795
1936	6,422,088*	1,042,924
1937	6,422,088*	1,241,505
1938	6,422,088*	1,406,579

*U. S. Census of Agriculture, 1934.

†Edison Electric Institute.





Wire and Wireless Communication

1. CAN the present (telegraph) companies under proper supervision profitably continue and prosper?

2. SHOULD the landline telegraph systems be consolidated?

3. SHOULD the landline and the international systems be consolidated?

4. SHOULD the landline and the international and telephone systems be consolidated into one gigantic monopoly?

5. SHOULD each of the three types of communication—written, oral, and radio—be confined to prescribed limits of activity?

SUCH was a 5-point program proposed by Senator Wheeler of Montana as the agenda for an inquiry into the telegraph business by a subcommittee of the Senate Interstate Commerce Committee, which opened in Washington May 22nd. The subcommittee, headed by Senator Minton of Indiana, was proceeding upon a resolution of Senator Wheeler for an investigation which is expected to explore the possibilities of merging the Western Union and Postal Telegraph companies.

Senator Wheeler appeared in person at the opening of the hearings and indicated that he was principally interested in demonstrating the economic and regulatory complications of the telegraph industry. However, it was expected that the subcommittee's exploration into merger possibilities would run afoul of the usual obstacle of labor opposition. The labor bloc is not opposed to a telegraph merger *per se* but insists that employment should not suffer in the process.

On the other hand, a satisfactory

merger formula which would include economies of capital investment and other operating costs, while omitting provisions for payroll economy, is not likely to be forthcoming. Under the circumstances, it is doubtful whether anything new or anything especially significant will come of the proposed telegraph investigation.

Be that as it may, Senator Wheeler made public letters from Secretary of Commerce Hopkins and Attorney General Murphy endorsing the Senate telegraph investigation. He quoted from Secretary Hopkins' letter as follows:

We feel that the problems of the telegraph industry have reached a critical stage. We are delighted at the prospect of having some responsible agency undertake a careful survey of the situation with a view to developing a constructive program. I should certainly hope that the resolution would provide sufficient authority and adequate funds to permit a thorough investigation. The highly sensitive nature of our business structure requires efficient communication service at reasonable rates.

Attorney General Murphy was quoted by Senator Wheeler as saying that the Department of Justice had suits pending against both major telegraph companies for alleged violation of the antitrust law and could supply much information to the investigating committee.

THE principal witness, however, before the subcommittee on the first day of the hearings was the special assistant to the Attorney General, Robert M. Cooper, who appeared on behalf of

PUBLIC UTILITIES FORTNIGHTLY

the Attorney General. Mr. Cooper stated:

The department feels that an investigation of the possibilities of such a plan would be extremely fruitful at this time.

Mr. Cooper disclosed the attitude of the Justice Department after declaring that under present conditions and for some time to come "it seems apparent that there is not enough demand for telegraph services to permit more than one efficient telegraph company to serve the domestic needs" for such service.

After pointing out that the FCC in 1935 recommended merger legislation, Mr. Cooper contended that from a purely economic standpoint the consolidation of the domestic telegraph systems "appears to be economically sound and justifiable both from the point of view of the establishment of an extensive, well-organized, efficient telegraph system and the interest of the public in stabilizing an industry which will at all times be capable of rendering an adequate service at a minimum cost to the public."

Mr. Cooper, who appeared as a substitute for Assistant Attorney General Arnold, presented figures based on the Justice Department's studies which showed that the rate of return on the property investment of Western Union amounted to 8.1 per cent in 1926, 7.0 per cent in 1929, and less than one per cent in 1938. For the Postal Telegraph & Cable Corp. the return on investment for 1926 was less than 1 per cent, for 1929 less than .1 of 1 per cent, and no return at all in 1938.

Mr. Cooper told the committee that "a careful analysis of these figures conclusively indicates that the telegraph companies today are faced with a serious loss of business which they seem unable to recapture." Principal causes for the business slump, said Mr. Cooper, are:

1. The lower rates or substitute services.
2. After a period of diversion expenses of the telegraph companies have been increasing rapidly, through no fault of the industry, to such an extent that they are unable to lower their rates to meet those of competing services.

FINALLY, the telegraph companies have been subjected to service competi-

tion of the government itself through its Army and Navy telegraph system. During the year 1937, it was pointed out, the government telegraph system transmitted approximately 90,000,000 repeated words for other departments of the government which would ordinarily have been sent by way of commercial companies.

Elimination of unnecessary duplication of facilities, Mr. Cooper contended, would result both in a solvent telegraph industry and lower telegraph rates. Mr. Cooper said:

Further delay in examining the possibilities and advantages of a consolidation of these companies may render its consideration a purely academic question. It is the opinion of the antitrust division that the proposed resolution is both timely and well considered, and that the public hearings contemplated should be commenced as soon as possible.

Isador Lubin, Commissioner of Labor

Statistics, suggested to the subcommittee that if a merger is authorized some provision should be made to take care of those people who would be thrown out of work. Senator Truman of Missouri, however, said that it was his understanding that neither company is making enough money now to take care of all the people they have on the payrolls.

* * * *

AN application for increased telephone rates for all exchanges operated by the Pacific Telephone & Telegraph Company in the state of Washington, except Seattle, was filed last month with the department of public service at Olympia. The new application supplements a previous request for revision upward of Seattle rates, filed in June, 1938. Neither can become effective until approved by the state department.

I. F. Dix, vice president and general manager of the company, estimated the new schedule, with those already under review by the department for Seattle, would, if they had been in effect during 1938, have increased the company's net revenue by about \$1,225,000. The rate of return on a telephone investment of about \$70,000,000 within the state would have been increased from 1.86 per cent to 3.6 per cent, Dix said.

WIRE AND WIRELESS COMMUNICATION

The new schedules include increases in rates as well as adjustments in rate areas and in the basis of charges for service. The department of public service had on file the company's application to increase intrastate toll rates between points more than 56 miles apart and for charging to customers the occupation taxes in cities levying such taxes. The department, however, has not acted on the applications, in lieu of a statewide investigation of telephone companies in which all rates, charges, and practices are to be reviewed.

The new application differs from the schedule filed for Seattle, Dix said, in that it provides both a flat rate and a message rate for business telephone (for Seattle all business was on the message rate) and in that it does not provide a residence message rate (as proposed for Seattle).

In the past five years, Dix said, the rate of return on the company's investment has never been more than 2.5 per cent and has been declining, due largely to increased payrolls and taxes. Annual payrolls have increased 55 per cent in that period and taxes 49 per cent, Dix said, the increase in payrolls and taxes during 1938 amounting to \$3,515,400 over 1933.

In submitting the schedule, Dix referred to the wide scope of the pending state investigation into telephone rates by the department of public service, recently authorized by the Washington legislature, and added that the company had no alternative "other than to place in the hands of the department filings of rates and charges which in our opinion should receive approval." He said that he hoped that the department's investigation would be the means of clearing up any misunderstanding regarding the company's operations within the state.

MEANWHILE, in neighboring Portland, Ore., the Pacific Telephone & Telegraph Company was engaged in negotiations looking toward a compromise of the long controversy between the city and company which resulted in pending litigation.

The controversy dates back several years to the expiration of the telephone company's franchise. There are an Oregon statute and a Portland ordinance which provide that the city may collect from any utility operating without a franchise 5 per cent of gross revenues. A new franchise was proposed by the city but rejected by the telephone company on grounds of alleged confiscation. The city thereupon went to court to compel the company to pay the 5 per cent occupation tax. Meanwhile, the Oregon Supreme Court sustained the reasonableness of the telephone company's existing rate structure.

Also, meanwhile, the company had been operating under a permit requiring it to pay 2 per cent of gross revenues, but the city had not been paying its bills for the use of several hundred telephones.

The litigation pending in the Federal courts has been permitted to drag until the court now insists that the litigants proceed or the suit will be thrown out of court. Portland officials doubt the city's chances for victory in the litigation, since the court has already intimated that the city is entitled only to reasonable compensation for the use of the streets, notwithstanding the exact terms of the 5 per cent ordinance.

A determination of the reasonableness of the occupation charge would presumably involve protracted procedure dealing with the company's property valuation earnings and expert testimony. Furthermore, since the Oregon Supreme Court's decision in the rate case makes it doubtful that the city could obtain a lower service rate for the local subscribers, there is reason to believe that the city council will be disposed to accept the company's compromise offer.

The proposed compromise would extend the company's present permit for five and a half years from June 30, 1939, with the company paying the city 2 per cent of gross revenues and supplying free service for 300 main-line telephones, and cancelling accumulated charges for telephone service to the city in the past. The city's attorney has recommended the

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settlement on the basis of the proposed compromise. The city's accumulated phone bill was estimated at \$373,000, which would in effect give the city a net of 3.64 per cent of the company's revenues, including the 2 per cent charge.

* * * *

DAVID Sarnoff, president of the Radio Corporation of America and chairman of the board of the National Broadcasting Company, tried to encourage competition for his network before the monopoly investigating committee of the Federal Communications Commission on May 17th.

Looking ahead only to the next five or ten years, he told the commission there was no technological reason to assume that broadcasting stations would not outnumber newspapers. He said:

All the space in the ether is available for new networks, and I am trying to encourage new ones. There are between 700 and 800 broadcasting stations now, but there is no reason why there should not be 7,000, or 70,000.

Sarnoff also referred to the early development of television, and of broadcasting printed newspapers. This was to persuade the commission that inflexible regulations should not be set up on the basis of existing broadcasting conditions that might be undated tomorrow.

The RCA president also argued against a suggestion that networks should be licensed. He stated to Commissioners Frederick I. Thompson, Thad H. Brown, and Paul A. Walker:

When you license the program-creating agency, in addition to licensing the equipment by assigning wave lengths, you introduce a new idea. You then regulate entertainment, education, news, and pictures, not the radio frequency. The minute that power is in your hands, it becomes almost unlimited power to license everything from beginning to end. You could license the Radio Corporation of America, and the individual broadcaster before the microphone . . . If the government writes a code to govern radio programs it will certainly establish censorship in direct violation of constitutional guaranties of freedom of speech.

* * * *

PROGRESS was being made in the twin cities on a compromise agreement be-

tween the state of Minnesota and the telephone companies, which was announced last month (PUBLIC UTILITIES FORTNIGHTLY, May 25, 1939, page 672). The compromise assured the St. Paul-Minneapolis metropolitan area subscribers an immediate rate saving of about 12 per cent and retroactive refunds averaging 25 per cent from June 1, 1936.

Judge Gustavus Loevinger on May 18th signed an order in Ramsey county district court requiring payment of refunds to St. Paul subscribers to start not later than July 15th, with interest at 6 per cent. State Attorney General Burnquist and C. B. Randall, counsel for the Tri-State Telephone & Telegraph Company, appeared in court to ratify the procedure.

Judge Loevinger's order provided that the telephone company give each subscriber a statement showing the amount to be repaid as excess charges and showing separately the interest thereon. The statement must show that the sum is available either in cash or credit, at the option of the subscriber. Until such statement is rendered, interest will continue to accrue.

The refunds apply only to the St. Paul district and are expected to amount to about \$1,700,000, exclusive of interest, which was estimated at an additional \$250,000. The entire refund process will be supervised by the court and by the office of the attorney general.

* * * *

BECAUSE of the outlook for an extra long session of Congress, the independent telephone industry is still hopeful of receiving some legislative relief from the burdensome restrictions of the wage-hour law on small rural telephone companies. This is true notwithstanding the unexpected decision of Chairman Norton of the House Labor Committee to back down on her promise to move for a "suspension of the rules" for her wage-hour amendment bill, which includes an exemption for telephone exchanges having less than 500 subscribers. The purpose of the expected maneuver was to cut off debate and prevent the opposition from amending Chairman

WIRE AND WIRELESS COMMUNICATION

Norton's wage-hour bill from the floor.

However, it takes a two-thirds vote to obtain a "suspension of the rules" and formidable opposition developed over the week-end prior to May 15th, centering around the congressional farm bloc. On that date, the administration forces were apparently convinced that the opposition could muster enough votes to beat Chairman Norton's motion. Rather than risk an open defeat, Chairman Norton admitted that she had a sudden "change of mind" and it was generally assumed that she would make some attempt to get the bill back into the House Labor Committee.

The opposition, of course, is not directed at the telephone amendment. A majority of the House members would probably be disposed to give the small telephone companies even more relief than the House Labor Committee allowed in the Norton bill. The controversy was centered on the agricultural provisions of the Norton bill. It was expected that the House farm bloc, in concert with the conservative Rules Committee, would make, as its next move, an attempt to put over a bill of its own rather than tinker with the Norton bill, even though it was pointed out that the House Labor Committee had lost control of the bill when it was reported to the floor.

Following her "change of mind," Chairman Norton attempted to make some further headway with her wage-hour amendments and at the same time divide the opposition by splitting her own original bill. To this end she introduced a revised bill which left out the controversial agricultural section but left in the exemption of telephone exchanges of less than 500 subscribers.

BUT meanwhile attention had shifted to the Senate side, where the leader of the farm bloc in that chamber, Senator Miller of Arkansas, introduced a bill which would increase the telephone exchange exemption under the wage-hour law to 800 stations. This provision would be in addition to the farm bloc's version of the agricultural exemption.

It was apparent that the farm bloc would like to have whatever support the friends of the independent telephone industry command, and there have been indications from Chairman Norton herself that this support is probably in excess of 50 per cent of the membership of Congress.

The telephone exemption clause of Senator Miller's bill was as follows:

Section 13 (a) of the Fair Labor Standards Act of 1938 is amended by adding at the end thereof the following: "; or (11) any switchboard operator, during any calendar year, employed in a public telephone exchange which at all times during the preceding calendar year had less than eight hundred stations."

A companion measure to Senator Miller's bill was expected from Representative Barden of North Carolina. While the chances for the enactment of the Miller-Barden bills seemed hopeful, they were clouded to some extent by the threat of President Roosevelt to veto any legislation amending the Federal wage-hour law which would go beyond those amendments agreed to by the wage-hour administration in the House Labor Committee. Probably the President's warning was intended chiefly to keep the farm bloc from going too far. At any rate, it was not believed likely that he would veto a separate bill containing telephone relief because of a difference between 500 and 800 stations.

For that reason, it is expected that if opposition on the agricultural front becomes too complicated for the friends of the telephone industry to risk further delay during the closing weeks of the session, there will be an attempt to sever the telephone relief provisions with the idea of obtaining speedy passage of a separate telephone amendment bill. For the present, however, it appears that the telephone support will string along with the farm bloc.

* * * *

P. S. Critics of the FCC will probably get another chance to howl when the House Appropriations Subcommittee includes an FCC appropriation for 1940 in the next deficiency bill — expected in June.



Financial News and Comment

By OWEN ELY

Green Light for Electric Progress

IN another department of this issue of PUBLIC UTILITIES FORTNIGHTLY (page 729) there is factual evidence of the amazing growth of the electric light and power industry, so well symbolized in the historical and descriptive electric exhibits at the New York World's Fair. There are, of course, some shadows on the financial horizon of the industry, but the general outlook is quite satisfactory.

Probably the most favorable factors in this respect are the courage and skill with which the industry has met adversity during the recent period of doubt and discouragement resulting from Federal regulation and competition. It has become increasingly aware of the possibilities for continued growth of electric service. Aggressive sales efforts for the building of residential consumption of electricity through installation of refrigerators, ranges, water heaters, and other household appliances have been sponsored by leading companies in the past year or so. Consolidated Edison of New York is at present conducting an energetic advertising campaign to substitute modern refrigeration for the outmoded ice-box by offering a "turn-in" discount of \$9.50. The increasing installation of appliances doubtless helps to explain why electric output has been currently running at about 10 per cent over last year, while bank clearings are only about 4 per cent greater and carloadings about 3 per cent (week ended May 13th).

The industry continues to look toward Washington for general guidance in its program of system realignment and physical expansion. The new SEC chair-

man, Jerome N. Frank, has issued a reassuring statement indicating that he favors the profit system and that progress is being made with the solution of the "\$ 11" problem. There have been some disturbing hints that trouble for the utilities has been brewing in other Washington quarters, but at this writing nothing very tangible has occurred to indicate another "crack-down." However, it is to be hoped that the government will not plan further huge competitive power developments, and that the problems resulting from present Federal competition, such as the current TVA settlement, adjustments in the Bonneville area, etc., can be smoothly and amicably settled.

Over the longer term the industry may face new problems due to recent developments in engineering and science. The Diesel engine, as a competitor of the central power station, may prove a disturbing factor. Several laboratories in the United States and Europe have simultaneously discovered that the atoms of an isotope of uranium, when bombarded with slow neutrons, explode and give off 200,000,000 electron-volts of energy—such radiation being about one billion times as "hot" as burning coal. If this estimate is correct, the power produced by atomic explosion, using one pound of uranium fuel an hour, would exceed the output of all existing power plants, according to a review by John J. O'Neill in the *New York Herald Tribune*. These figures may seem fanciful, and the new discovery will doubtless take many years to develop commercially—if, in fact, it is capable of such development—but, nevertheless, it may prove a vital interest to the electric industry over the next decade or so. While it might conceivably

FINANCIAL NEWS AND COMMENT

CONSOLIDATED INCOME STATEMENT

Covering the Private (Commercial) Electric Light and Power and Allied
Nonelectric Utility Industry
(000 omitted)

	1937	1932	1927	1922
Operating Revenue	\$2,603,318	\$2,399,019	(a)	\$948,904
Operating Expenses	1,205,215	1,049,672	(a)	498,730
Taxes (Including Federal Income Tax)	359,603	244,876	(a)	73,128
Provision for Depreciation and Retirement	254,779	186,081	(a)	59,272
Total Revenue Deductions.....	\$1,819,597	\$1,480,630	(a)	\$631,132
Operating Income	\$783,721	\$918,388	(a)	\$317,772
Rents (net)	3,637	15,268	(a)	3,546
Balance of Income	787,358	903,120	\$717,749	314,226
Nonoperating Income	61,972	61,752	53,959	21,134
Gross Corporate Income	849,330	964,872	771,708	335,360
Interest and Amortization of Debt Disc. & Expense	289,507	361,358	269,602	125,596
Other Deductions	45,642	27,843	33,935	17,142
Net Income	\$514,180	\$575,671	\$468,170	\$192,622
Preferred Dividends	\$126,327	(a)	(a)	\$33,557
Common Dividends	307,627	(a)	(a)	95,687
Total	\$433,954	\$493,723	\$338,238	\$129,244

(a) Not included in the schedule.

CONSOLIDATED BALANCE SHEET

<i>Assets</i>	1937	1932	1927	1922
Utility Plant—Electric	\$11,936,205	\$12,124,807	\$8,547,339	\$4,229,356
—Gas	1,370,493	1,388,140	1,250,000	
—Traction	263,180	367,049	482,324	
—Other	478,828	490,425	306,763	
Total Utility Plant	\$14,048,706	\$14,370,421	\$10,586,826	\$4,229,356
Investments and Funds	\$1,308,121	\$957,028	\$656,719	\$482,152
Current and Accrued Assets	972,492	978,148	982,201	424,308
Deferred Debits	494,083			
Capital Stock Discount and Expense... ..	33,555	707,107	714,060	351,819
Reacquired Securities	43,006			
Deficit	33,671	19,836	10,582	16,980
Total Assets	\$16,933,634	\$17,032,540	\$12,950,388	\$5,504,615
<i>Liabilities</i>				
Capital Stock	\$6,540,461	\$6,935,849	\$5,095,135	\$2,158,497
Cash Investment	2,988	6,868	6,605	17,920
Long-term Debt	6,837,592	6,678,762	5,309,878	2,248,746
Current and Accrued Liabilities	707,520	747,309	671,650	406,760
Depreciation on Retirement Reserve ..	1,346,426	1,141,067	700,162	
Other Reserves	385,287	240,500	166,549	341,319
Deferred Credits	42,349	273,755	277,547	54,526
Contributions in Aid of Construction ..	36,428			
Surplus	1,034,583	1,008,430	1,722,862	276,847
Total Liabilities	\$16,933,634	\$17,032,540	\$12,950,388	\$5,504,615

Source: U. S. Census.

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mean the eventual scrapping of our present steam and hydro plants, electric distribution facilities would still be required and, with the advent of ultra-cheap power, would necessarily have to be greatly expanded to take care of more universal house heating, air conditioning, etc.



Idle Dollars and Securities Act

PRIVATE placing of the huge Commonwealth Edison bond issue recently stirred both the investment banking fraternity and the SEC to renewed discussion of possible methods to restore such financing to former channels.

President Roosevelt recently expressed concern over the problem of putting idle men and idle dollars to work and has asked the so-called monopoly committee to search for the answer. The handicaps to which business generally, and the investment bankers particularly, are subjected by present legislation should be only too obvious. While it may be true that registration costs are not a vital factor, nevertheless, wherever possible, corporation directors are glad to avoid risking the personal punitive penalties which they may inadvertently incur if the registration prospectus contains misstatements.

Then there is the continuing doubt as to what form of advertising, other than the prospectus, can be used legally—and the prospectus, while it may be biblical in its accuracy and completeness, is certainly not an efficient medium for selling. It is too long and too detailed, and salient figures cannot be emphasized or readily indicated for fear of overstepping the law. It is essentially a legal document, comparable to the mortgage indentures which grace the archives of every big banking institution, but are seldom read by the individual security buyer. It is easy enough to sell high-grade bonds because these are bought by institutions; the present need is for liberalization of the rules so that junior bonds and stocks can be attractively described and their "romance" and appeal put across to the

buying public. The government forgets, apparently, that these issues must be "sold" — the public will not take them automatically. Instead, timid savings will merely continue to go into savings banks, insurance policies, etc., and the institutions will continue to bid up the prices of high-grade bonds to fantastic levels.

Another way in which the investment banker is handicapped is the 20-day "incubation" period between the date of registration and the date of offering. There is said to be a consensus of opinion "in the trade" that the 20-day wait required under registration procedure was the principal factor in the Commonwealth Edison issue being privately placed, and that considerations of price and liability were secondary. This contention appears to be fairly well substantiated by the record of the company's more recent public financing operations. In any event the serious effects which a 20-day wait may have during a period of rapidly falling prices were amply demonstrated in the autumn of 1937, when several large banking houses sustained heavy losses. Shortening of the period to five or ten days—the length of time depending possibly on the nature of the financing—should, it seems, be an important aid toward reopening the capital markets.

The SEC is said to be concerned with the growth of private financing. It should also be concerned with the threatened rapid deterioration of our investment banking machinery. Wall Street houses cannot be expected to maintain their research and selling staffs in comparative idleness for an indefinite period. Thus far the street has remained hopeful that ways could be found to surmount the present selling obstacles, while still conforming to the spirit of new legislation, and some slight progress toward this end has been made. What seems really needed is an overhauling of the Securities Act in the light of recent experience—yet the SEC has largely concentrated its efforts on the formulation of additional proposed legislation governing trust indentures, etc.

FINANCIAL NEWS AND COMMENT

Preferred Dividend Arrears

SEC Commissioner Robert E. Healy, who acted as chairman until Mr. Frank's election, was recently quoted in the press as stating that "something has got to be done sooner or later" about utility holding companies which have allowed preferred dividends to accumulate.

"There are dozens of companies in the holding company field where arrearages on preferred dividends have piled up from three to five — and even eight years," Mr. Healy said in an interview.

SEC statistics show that on January 1, 1938, 48 of 158 registered holding companies had preferred stock arrearages amounting to about \$336,000,000. The total par value of these stocks on which arrearages have piled up was about \$1,330,000,000.

An independently prepared tabulation of dividend arrearages of leading domestic electric and gas holding companies, whose securities are actively traded in, is presented herewith. Total dividend arrearages for these companies are estimated at about \$224,000,000. There

are doubtless many stocks in the SEC table whose current market valuations have established them on a similar footing with speculative common stocks, and the exact amount of the arrearages on such issues is of academic rather than practical interest to their holders.

It is generally recognized that a considerable amount of financial readjustment is desirable for many holding companies, but the reasons for the lack of progress are rather obvious. The interval of two or three years of moderate earnings improvement between the depth of the depression (1932-33) and the passage of the Holding Company Act (1935) was insufficient to permit much utility recapitalization and, of course, the back dividends at that time were far smaller than at present.

Since the passage of the act, the holding companies have remained uncertain of their exact legal status; and it was not until a few months ago that real work was undertaken toward revamping the holding companies' systems. Naturally there has been little incentive to offer preferred stockholders new securities



TOTAL PREFERRED DIVIDEND ARREARS OF LEADING ELECTRIC AND GAS HOLDING COMPANIES

	Outstanding (1,000 sh.)	Arrears (per share)	Amount (millions)
American P. & L. \$5 Pfd.	978	16.25*	\$15.9
American P. & L. \$6 Pfd.	794	19.50*	15.5
American Superpower \$6 Pref.	235	42.00	9.9
Arkansas Nat. Gas 60¢ Pfd.	2,190	3.00*	6.7
Cities Service 60¢ "B" Pfd.	119	4.05	.5
Cities Service \$6 Pfd.	792	40.50	32.1
Commonwealth & So. \$6 Pfd.	1,500	12.75*	19.1
Electric P. & L. \$6 Pfd.	255	38.50	9.8
Electric P. & L. \$7 Pfd.	514	44.92	23.1
Electric P. & L. \$7 2nd Pfd.	80	49.00	3.9
Inter. Hydro-Elec. \$3.50 Pfd.	142	16.63	2.4
Long Island Light \$6 "B" Pfd.	179	6.00	1.1
No. States Power (Del.) \$7 Pfd.	390	1.75*	.7
No. States Power (Del.) \$6 Pfd.	390	1.50*	.6
Standard Gas & Elec. \$4 Pfd.	757	24.00	18.2
Standard Gas & Elec. \$7 Pfd.	368	36.40	13.4
Standard Gas & Elec. \$6 Pfd.	100	31.20	3.1
United Corp. \$3 Pfd.	2,489	1.25*	3.1
United Gas Corp. 1st \$7 Pfd.	450	25.13*	11.3
United Lt. & Power \$6 "A" Pfd.	600	42.00	25.2
Utilities P. & L. \$7 Pfd.	181	43.75	7.9
Total			\$223.5

*Part or all of the regular dividend rate is being currently paid.

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in lieu of back dividends, because this problem was inextricably interwoven with the larger problem of corporate realignment, for which Federal approval is required. Presumably the many plans to conform to § 11, now on file in Washington, to which the newly constituted SEC is about to give its attention, make some provision for settling dividend arrears; if not, it would seem desirable that the SEC call this to the attention of the companies and request them to revise or supplement the plans already submitted. While this might be a little beyond the commission's legal powers, it is believed that the industry would cooperate.

New Financing

WHILE many utility deals are reported in progress, actual financing by the industry remains at a low ebb, with no public offerings of importance in the fortnight ended May 20th. However, a large private deal was announced May 9th when Commonwealth Edison Company completed arrangements for the sale of \$114,500,000 40-year 3½s at 102 to fifteen insurance companies, subject to the approval of the Illinois Commerce Commission. This is probably the largest "private" sale ever made by a utility company and the 40-year maturity is also the longest that a corporation has obtained in many years, most new offerings running for thirty years (or in one or two cases for thirty-five years). Halsey Stuart & Co., Inc., assisted in working out the financing. *The New York Times* commented as follows:

Whether the Commonwealth Edison Company could have obtained a better price for its \$114,500,000 of 3½ per cent bonds, due in 1979, through public offering was the theme of discussion in underwriting circles. Some bankers, basing their calculations on the quotations on outstanding issues of the company, held that the new 3½s could have been sold in the open market through underwriting channels at about 3 points higher than the 102 at which they were placed privately. Conservative opinion, however, is that, in view of the large amount issued, registration costs, underwriting fees, and other charges involved, the company did not lose

any such amount as 3 points through the private transaction. Much more important from an economic point of view, in the opinion of the bankers, is the effect of such a private deal on the smaller institutional investors, banks, trust, fiduciary accounts, and even the individual investor, all of which are left "out in the cold" in respect to obtaining replacements for the 4s or 3½s which they might hold. It is understood, incidentally, that the insurance companies that bought the issue hold only about \$10,000,000 of the bonds that are to be retired.

A syndicate headed by Blyth & Company on May 12th successfully offered the \$5 preferred stock of Pacific Lighting Corporation at 102. The offering consisted of 38,919 shares, the balance of 200,000 not taken by holders of the company's \$6 preferred under an exchange offer.

Iowa-Nebraska Light & Power Company, subsidiary of the United Light & Power Company system, filed a declaration May 15th with the SEC with regard to proposed new financing. Two million dollars 2½ per cent promissory notes, secured by an issue of \$3,000,000 refunding 5s of 1969, are to be sold privately at par; and 20,000 shares of common stock will be issued to Continental Gas & Electric Corporation at par for liquidation of indebtedness.

West Texas Utilities Company proposes to issue \$18,000,000 first mortgage bonds due 1969, and \$4,000,000 2½ to 4 per cent serial debentures due 1940-48. Harris, Hall & Co. will head the underwriting. Public offering of \$9,000,000 Montana-Dakota Utilities first 4½s of 1954, at a price of 101, is currently proving successful. A Shawinigan Water & Power refunding operation involving issuance of \$26,367,000 first 4s will be handled by a Canadian group. Oklahoma Power & Water Company, Middle West subsidiary, plans to issue \$2,000,000 3½ per cent 5-year notes to be secured by \$2,500,000 first 5s of 1948.

Consolidated Gas, Electric Light & Power Company of Baltimore, which recently refunded its preferred stock on an attractive basis, on May 19th registered with the SEC \$7,000,000 30-year refunding 3 per cent bonds. White, Weld & Company are to head the underwriting.

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INTERIM EARNINGS STATEMENTS

	No. of Months Included	End of Period	System Earnings per Share (a)			
			Last Period	Previous Period	Per Cent Increase	Per Cent Decrease
<i>Electric and Gas</i>						
American Gas & Electric	12	Mar. 31 (b)	\$2.36	\$2.37	..	..
American Power & Light (Pfd.) ..	12	Dec. 31	5.31	6.46	..	18%
American Water Works	12	Mar. 31 (c)	.48	.83	..	42
Boston Edison	12	Mar. 31 (c)	8.84	8.44	4%	..
Columbia Gas & Electric	12	Mar. 31 (c)	.39	.59	..	34
Commonwealth Edison	12	Mar. 31	2.30 (g)	2.16 (g)	6	..
Commonwealth & Southern (Pfd.)	12	Mar. 31 (bc)	8.87	9.12	..	3
Consolidated Edison, N. Y.	12	Mar. 31 (c)	2.08	2.23	..	7
Consolidated Gas of Baltimore	12	Mar. 31 (c)	4.17	4.46	..	7
Detroit Edison	12	Apr. 30	7.44	6.26	19	..
Electric Power & Lt. (1st Pfd.) ..	12	Feb. 28 (b)	6.39	11.82	..	46
Engineers Public Service	12	Mar. 31	1.20 (h)	.79 (h)	52	..
Inter. Hydro-Electric (Pfd.)	12	Dec. 31	3.76	15.63	..	76
Long Island Lighting (Pfd.)	12	Mar. 31 (c)	4.34	5.06	..	14
Middle West Corp.	3	Mar. 31	.24	.11	118	..
National Power & Light	12	Dec. 31	1.28	1.37	..	7
Niagara Hudson Power	12	Mar. 31 (c)	.53	.70	..	24
North American Co.	12	Mar. 31	1.61	1.77	..	9
Pacific Gas & Electric	12	Mar. 31	2.53	2.68	..	5
Public Service Corp. of N. J.	12	Apr. 30 (b)	2.61	2.44	7	..
Southern California Edison	12	Mar. 31 (c)	2.18	2.10	4	..
Standard Gas & Elec. (Pr. Pfd.) ..	12	Mar. 31 (c)	4.63	7.41	..	38
United Gas Improvement	12	Mar. 31 (c)	1.00	1.07	..	7
United Light & Power (Pfd.)	12	Mar. 31	5.33	8.23	..	35
<i>Gas Companies</i>						
American Light & Traction	12	Mar. 31	1.54	1.69	..	9
Brooklyn Union Gas	12	Mar. 31 (c)	2.78	2.23	24	..
Lone Star Gas	12	Mar. 31 (c)	1.03	.97	6	..
Pacific Lighting	12	Mar. 31	4.79	3.32	44	..
Peoples Gas Light & Coke	12	Mar. 31	2.95 (f)	2.99 (f)	..	1
United Gas Corp. (1st Pfd.)	12	Feb. 28	12.16	22.13	..	55
<i>Telephone and Telegraph</i>						
American Tel. & Tel.	12	Dec. 31	8.32	9.76	..	15
General Telephone	12	Mar. 31	1.71 (e)	1.62 (e)	6	..
Western Union Telegraph	12	Mar. 31 (c)	D1.32	.77	..	..
<i>Traction Companies</i>						
Greyhound Corp.	12	Mar. 31 (c)	2.01	1.72	17	..
Twin City Rapid Transit	3	Mar. 31	.33	.01	..	..
<i>Systems outside United States</i>						
American & Foreign Pwr. (Pfd.) ..	12	Dec. 31	6.83	7.11	..	4
International Tel. & Tel. (d)	12	Dec. 31	1.10	1.60	..	31

D—Deficit.

(a) On Common stock, unless otherwise indicated following name of company; in some cases Federal surtax not deducted.

(b) Data also available for month indicated.

(c) Data also available for quarter indicated.

(d) Excludes Spanish subsidiaries and Postal Tel. & Tel. Co.

(e) Includes earnings of General Telephone Tri Corp. and subsidiaries from August 30, 1938 (date of acquisition).

(f) Before reservation for rate litigation, \$6.77 compared with \$3.38.

(g) Based on adjusted consolidated net income.

(h) Excluding loss of Puget Sound Power & Light Company.



Power Cooperation Urged by Roosevelt

PRESIDENT Roosevelt on May 26th urged the cooperation of public and private power interests in coordinating facilities better to serve consumers and investors.

He made his statement in a memorandum which he sent to chairmen of the House and Senate Military Affairs committees, accompanied by a copy of the annual report of the New York State Power Authority. (See page 762).

Mr. Roosevelt noted that the report was "obviously drafted to test the willingness of the private utilities to cooperate with the government agencies in a program of expansion in order to make possible the widest possible use of electricity at the lowest possible cost."

He also expressed hope for early agreement between the United States and Canada on a new St. Lawrence waterways treaty. He noted that the development of the St. Lawrence resources would "be an important contribution toward eliminating possible power shortages in case of war."

Record Attendance Expected At EEI Meeting

PREPARATIONS were being made for a record-breaking attendance at the seventh annual convention of the Edison Electric Institute, to be held at the Waldorf-Astoria Hotel in New York city, June 6th to 8th (details of which were announced in PUBLIC UTILITIES FORTNIGHTLY May 25th, page 690).

The convention was scheduled to present discussions of vitally important subjects in the most concentrated form possible. The entire business program was arranged so as to occupy three intensive forenoon sessions starting Tuesday morning, June 6th. On Tuesday afternoon the convention was to be transplanted directly to the World's Fair.

Several committee meetings were to be held on Monday, June 5th, on which day registration for the convention was to open at 10 a. m. Thomas N. McCarter was to be speaker of honor at the special luncheon, June 8th.

JUNE 8, 1939

The March of Events

U. S. Census Report on 1937 Electric Rates and Customers

ON May 23rd, the U. S. Census Bureau released preliminary figures for rates and customers as part of its 1937 quinquennial census of the electric light and power industry in the United States. An outstanding feature of this report was the revelation that the private electric power industry received less for the general average kilowatt hour of electricity sold than the municipally owned plants.

The average revenue received per kilowatt hour for the privately owned industry was given as 1.8 cents, while municipals received an average of 2.4 cents. Public power districts and cooperatives received still less (0.9 cents), while Federal and state agencies averaged 0.2 cents; but the last two classes of operations were greatly limited and mostly of a wholesale or by-product nature (as indicated by the small total number of customers).

The general average revenue per kilowatt hour received by these four classes from ultimate customers (as distinguished from sales for resale by other distribution agencies) was 2.1 cents for the private industry, 2.6 for the municipals, 1.3 for the districts and coöps, and 0.4 for the Federal and state agencies.

These figures, however, covered all classes of service. In the strictly urban residential classifications, the municipal plants showed to better advantage. The municipals received 3.8 cents per kilowatt hour, as compared with 4.4 cents for the private industry—exactly the reverse of respective charges by the two groups for farm residential service. In the strictly rural service field, however, the private industry's charges once more were lower—3.1 cents for "farm" and 3.4 cents for "nonfarm," as against municipal plant charges of 5 cents and 4.4 cents, respectively.

Obviously, the lower general average of the private industry's charges resulted principally from the greater volume of industrial business as compared with the municipal plant concentration upon urban residential business. Stated in another way, the Census figures would indicate that the general policy of municipal plants tends toward making electric rates more attractive to residential users, who are citizens of such municipalities, but not

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	<i>All Sources</i>	<i>Privately Owned</i>	<i>Municipal</i>	<i>Coöperatives, Districts, etc.</i>	<i>Federal & State</i>
Revenue per kwh.	1.8¢	1.8¢	2.4¢	0.9¢	0.2¢
Ultimate consumers	2.1¢	2.1¢	2.6¢	1.3¢	0.4¢
Residential { Farm	3.7¢	3.8¢	4.4¢	2.6¢	2.4¢
{ Nonfarm	4.3¢	4.4¢	3.8¢	2.8¢	1.9¢
Rural { Farm	3.2¢	3.1¢	5.0¢	4.0¢	} 2.6¢*
{ Nonfarm	3.4¢	3.4¢	4.4¢	3.8¢	
<i>Sales to ultimate consumers:</i>					
<i>Pct. of total sales</i>	78%	78%	89%	49%	23%**
<i>Thousands of customers:</i>					
Residential { Farm	615	556	32	25	1.3
{ Nonfarm	21,590	19,365	2,175	18	3
Rural only { Farm	538	478	27	30	} 3*
{ Nonfarm	169	155	12	1.2	
<i>Sales (kwh.) in year:</i>					
Residential { Farm	1,084	1,085	772	1,470	975
{ Nonfarm	779	770	850	935	2,001†
Rural { Farm	1,822	1,964	764	637	} 1,517*
{ Nonfarm	1,809	1,847	1,220	864	
<i>Cost per year:</i>					
Residential { Farm	\$40	\$41	\$34	\$38	\$23
{ Nonfarm	\$34	\$34	\$32	\$26	\$38
Rural { Farm	\$58	\$61	\$38	\$25	} \$40*
{ Nonfarm	\$62	\$62	\$54	\$33	

* Includes farm "commercial and industrial sales."

** Italics supplied.

† Reported as "residential or domestic," but apparently includes power for irrigation water pumping.



making a comparatively attractive bid for other classes of business. The policy of the private electric industry, on the other hand, would seem to give industrial, rural, and other classes of consumers more balanced rate treatment, as compared with the city residential customer.

Along this line, the Census figures show that although the private power industry served less than ten times the number of total customers served by the municipal plants, the private industry sold its customers more than twenty times as much power as the municipals sold theirs—the bulk moving into sales to non-residential consumers.

Such figures may serve to stir speculation as to the relative effect of the two divergent rate policies upon the general long-range economy of the nation. It would appear, of course, that the emphasis on urban residential service by municipal plants is the normal result of political organization and, to some extent, legal limitation; whereas the private industry's activity in the heavy duty field is the general result of private commercial enterprise.

Another interesting fact brought out by the latest Census figures: The average cost of electricity to ultimate consumers in 1937 was

only about two-thirds of the cost in 1932. The average customer, however, spent \$80 for electric service (all classes), as compared with \$76 in 1932. Detailed comparisons of residential use, rates, etc., between 1937 and 1932 are not practicable because of changes in the classification of reporting establishments and of their customers.

The change in customer grouping is due to rules adopted by the Federal Power Commission and followed by the Census Bureau. These rules provide that revenues from energy supplied for residential or domestic service shall be reported in one account, while revenues from service billed under distinct rural or farm rates shall be reported in another account. The Census Bureau subdivided these two groups into "farm" and "nonfarm" customers. It appeared that privately owned utilities served approximately 90 per cent of all farms reported as having electric service.

The chief obstacle to a proper consideration of the 1937 data concerning Federal and state plants probably lies in the classification of power sold from plants operated by the Bureau of Reclamation, including Boulder dam. This source, in 1937, accounted for practically all power shown in the Census report under the heading of "Federal and State." With an

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average consumption of 2,000 kilowatt hours per nonfarm customer for "residential or domestic" service, it is likely that energy used for water pumping was included. This, of course, would materially reduce the average rate. Detailed reports by states, soon to be used, probably will shed more light upon the subject.

A brief transcript of the preliminary Census figures appears on page 757.

Frank Heads SEC

JEROME N. Frank on May 18th was elected chairman of the Securities and Exchange Commission by a 3 to 2 vote immediately after Leon Henderson had taken the oath as a member of the commission.

Commissioners Robert Healy and George C. Mathews, Republicans, refused to vote for Mr. Frank. Their reasons were not given. There had been talk of clashes of temperament and differences of view, particularly in connection with utility matters. Mr. Healy sought to clear the atmosphere after he had refused his vote by pledging his support to the new chairman.

Soon after his election Mr. Frank summoned a press conference and set forth his own and the commission's immediate plans. He said there was to be no new legislation proposed by the commission for this session of Congress, except such as may develop out of the commission's investment trust reports.

Mr. Frank stated there would be no "cracking down" on utility holding companies, but there was to be action toward simplification and integration, with conferences within a few weeks between members of the commission and heads of utility companies. He said:

"Through direct negotiations we have made very considerable progress with the utility industry. As you know, former Chairman Douglas and Judge Healy started the ball rolling on the solution of the § 11 problem. Ideas have become clearer, some blueprints have evolved. The architects have pretty nearly finished their general designs and it's getting near the time when we have to bring in the carpenters and bricklayers. It would be unwise to leave this problem of simplification and integration hanging too long over the utility industry. Otherwise, uncertainty as to its practical meaning may become disturbing."

Florida Canal Beaten

THE Senate on May 17th defeated a bill to authorize construction of the Florida ship canal by a vote of 45 to 36. The vote was considered significant as a test of economy sentiment freed of the usual considerations in legislation involving group interests, it was said.

Defeat of the measure served to stop consideration for the time being of a project, of unknown actual cost, but which had been estimated to involve potential Federal expendi-

tures of between \$200,000,000 and \$300,000,000.

The bill failed despite broad concessions by Senator Pepper of Florida, its chief sponsor. Defeat was made possible only by a sharp split among the Democrats, of whom a sizeable group bolted the majority leadership of Senator Barkley, who made a last-minute appeal for the project principally as a defense measure, and secondarily as an aid to Atlantic-Gulf commerce.

Power Pact Signed

THE Tennessee Valley Authority and public power interests in east and middle Tennessee last month contracted for purchase of practically all properties of the Tennessee Electric Power Company. The \$78,600,000 transfer was contingent upon "enactment by Congress of supplementary legislation making available financing for the acquisition of property by the authority."

The contract was signed in behalf of the authority by Dr. Harcourt A. Morgan, chairman of the TVA board; for Commonwealth & Southern Corporation, holding company for Tennessee Electric, by Wendell Willkie, president of the corporation; and by representatives of 30 rural cooperative associations and municipalities, including Nashville and Chattanooga.

Transfer of the properties was scheduled to take place in New York on payment of the entire purchase price June 20th, "unless another date not earlier than June 1st or later than June 30th" is agreed upon. TVA will pay about \$44,500,000 of the total price and the cities approximately \$34,100,000.

SEC Seeks Depreciation Data

THE utility division of the Securities and Exchange Commission was reported last month to be conducting a nation-wide survey of the depreciation reserves of large utility systems to determine whether they are adequate. In addition, the commission itself was said to be "cracking down" somewhat on companies whose depreciation policies or reserves and expenditures for maintenance and repairs it regards as inadequate.

The commission was reported following two methods in endeavoring to correct alleged abuses. One was to attempt to persuade a utility appearing before it in connection with a proposed security offering to write an "adequate" depreciation and maintenance policy into the indenture of securities. The second was to condition the approval of the proposed issue on the maintaining and following of a depreciation and maintenance policy which the commission regards as adequate.

An avowed purpose of these moves by the commission was to make companies whose depreciation and maintenance policies fall below what the SEC views as a standard of

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safety to maintain "depreciation regardless of the payment of dividends," rather than to "pay dividends regardless of whether adequate depreciation reserves" are maintained, it was said.

In connection with its survey of the depreciation reserves of the various electric systems, the utility division stated it wanted to know what shape these reserves were in before the companies came before the SEC in connection with a security offering, integration proposal, or other matters.

SEC Raises Exemption

THE Securities and Exchange Commission, in an amendment to the Public Utility Holding Company Act of 1935, has increased from \$50,000 to \$100,000 the amount of utility assets which may be sold by a registered holding company, directly or indirectly, without obtaining approval by the commission prior to the sale.

However, the exemption will be available only when utility assets within the \$100,000 limit are sold to a person other than a registered holding company or subsidiary, or where the acquisition of the assets by a company in a registered holding company system has been expressly authorized by a state commission.

The commission also amended the rule to make clear that in calculating the amount of securities which may be sold without commission approval, it is not necessary to take into consideration sales of securities expressly authorized by the commission. A similar clarifying amendment was adopted with relation to sales of utility securities and assets by a registered holding company or subsidiary to associate companies or affiliates.

The amendments were made to paragraph (3), subparagraph (5) of paragraph (d), and subparagraph (4) of paragraph (d), respectively, of rule U-12-F-1.

Hopeful of Railroad Relief

OPTIMISM as to the prospects of railroad relief legislation at this session of Congress was expressed by President Roosevelt recently at a press conference, coincident with action by the Senate Interstate Commerce Committee in reporting favorably a detailed bill to establish a "bankruptcy court" for railroads.

President Roosevelt, after a conference with Senator Wheeler and Representative Lea of California, chairmen respectively of the Senate and House Interstate Commerce committees, said that three bills pending before Congress seemed to put this program in very good shape. He said that, without discussing details, he could approve generally the objectives of the proposed legislation.

The President said he was confident that legislation could be perfected in conference, despite disparity in the pending bills.

The bill reported to the Senate, written by Mr. Wheeler and Senator Truman, was said to represent a formula for quick reorganization of railroads under procedure designed to take this type of case off the dockets of Federal courts. The bill was reported only a few hours after Daniel Willard, president of the Baltimore & Ohio Railroad, testified before the Senate committee in favor of the measure. Mr. Willard said that the B. & O. had been able to meet its fixed charges for forty years up to 1938, and expressed the belief that if this bill were operative the road could reorganize without going into receivership.

Of the two other bills pending, one was written by Representative Chandler of Tennessee and the other by Senator Wheeler.

Utility for Puerto Rico

PUERTO Rico recently declared its desire to buy the hydroelectric property owned and operated by the Puerto Rico Railway Light & Power Company through approval of a legislative bill authorizing the issuance of bonds for purchase of the property.

The property is owned by the Canadian-controlled International Power Company, and is valued roughly at \$7,000,000. Canadian interests assumed control of the property in 1908, when the then owner, the J. G. White Management Corporation, found it inadvisable to continue the development. The property includes lighting and power service for virtually a third of the island, with street car system in San Juan.

Two years ago the insular government bought the Ponce Electric Company from Stone & Webster and the government's further development now of hydroelectric power was said to indicate its commitment to the policy of government-owned power aided by Federal government loans.

Alabama

Power Tax Attacked

A VIGOROUS attack on a proposal to levy a tax on municipally produced electric power was made before a section of the recess finance and taxation committee of the state

legislature last month by representatives of the Alabama League of Municipalities.

Quince Eddins, manager of the Decatur power system, declared that to levy a 12-mill kilowatt tax, as projected in a pending bill, "would drive industries away" from northern

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Alabama. He said such a levy would be a tax of 25 per cent which he described as "ridiculous."

Upholding TVA activities in north Alabama, Mayor W. B. Mahan, of Russellville, told the committee "we do not refute the claim that a loss of \$93,000 already has been sustained in state, county, and city taxes, but the TVA has put back \$133,000." Mahan referred to a report by John Lapsley, state revenue department counsel, who had estimated tax losses ultimately would reach approximately \$1,500,000.

Members of the delegation, including Mayor W. I. Collier, of Florence, said much of the revenue now being derived from municipal systems was going to the schools.

Opposing the proposed levy of municipal power, J. W. Johnson, manager of the Florence electric department, said TVA was making long-time contracts with industries "and would like to know the contracts would not be upset by state legislation."

May Relinquish Facilities

WITHDRAWAL on May 15th of litigation to block the purchase of Bessemer public utility improvement bonds was believed to have opened the way for sale of the Birmingham Electric Company's facilities as a part of that municipality's expanding utility system.

Simultaneously, it was ascertained from Mayor Jap Bryant, of Bessemer, that the city had received \$250,000 from the Public Works Administration for the first batch of bonds sold for financing part of its municipally owned electric system.

The Bessemer system, when completed, will represent an expenditure of \$1,238,000, of

which amount 45 per cent will be an outright grant from the PWA and the remaining 55 per cent the proceeds from the sale of bonds. Approximately \$300,000 of the grant money had already been received from the government.

Mayor Bryant said the Birmingham Electric Company had proposed that the city buy its facilities in Bessemer several months ago, but that the city council had declined to go into the case until the suits filed by the Alabama Power Company to stop sale of its bonds had been withdrawn.

Power Bill Favored

ENACTMENT of a law to require state public service commission approval of "rules and regulations" set up by the Alabama Power Company would be asked of the state legislature by its recess judiciary committee. Committee members also had under discussion a proposal to give the state commission authority over municipally operated utilities.

Representative Hugh Kaul, of Jefferson, said he planned to seek repeal of the present statute exempting municipal systems from state regulation.

The power company measure was approved by the committee after Commissioner Clint Harrison told members the utility had expressed the opinion it could set up rules and regulations for building new lines and connecting new customers without consulting the commission or getting its approval.

Harrison said the commission had been informed the Alabama Power Company was refusing to construct new lines unless it was guaranteed \$1 in annual revenue for each \$4 required in construction.

California

Rejects Municipal Power

SAN FRANCISCO voters on May 19th rejected, by a vote of approximately 2½ to 1, a \$55,000,000 revenue bond proposition to buy or build a municipal power distribution system for Hetch Hetchy power.

Returns from all 1,055 precincts showed the measure had been defeated by a vote of 121,895 to 49,843.

Governor Olson and Representative Franck R. Havenner, at a pro-power mass meeting, had urged passage of the power bond issue. Mayor Rossi also favored adoption of the plan.

Rate Cuts Announced

REDUCTIONS of \$3,200,000 annually in Pacific Gas and Electric Company rates were announced recently by the state railroad com-

mission, which would file new electric rates June 1st, so as to become effective with bills rendered after July 1st. Ray C. Wakefield, president of the state commission, said lower gas rates would probably become effective August 1st.

The reductions will be effective over the utility's entire system, which includes most of the cities from Bakersfield to Eureka. Electric rates would be cut \$2,200,000 annually and gas rates \$1,000,000. The adjustments, Wakefield said, would be made without discrimination as between communities of their respective classifications. This large reduction in rates, the culmination of three separate investigations by the commission's staff, "is gratifying to the commission," he said.

The state commission subsequently ordered the Southern California Gas Company to reduce its rates \$1,300,000 annually. The savings,

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throughout the system of the utility, would become effective with bills rendered on and after July 1st.

Commissioner Ray L. Riley, in announcing the reduction, stated:

"This reduction in natural gas rates throughout most of southern California is the culmination of an investigation inaugurated by the railroad commission several months ago. It brings to a total of \$5,500,000 the reductions in rates effected by the commission by its policy of continuous investigation since January 1, 1939.

"As the commission's own investigation was nearing completion, invitations to 48 municipalities were issued to three conferences held in Visalia, San Bernardino, and Los Angeles, at which rate problems were discussed. Suggestions offered during these conferences are under consideration now as commission engineers are preparing the new rate schedules."

Governor Olson, in a recent radio address, asked the support of the people in the administration's plans for expansion of public ownership in the field of water and power development. The maximum benefits of electric power, he declared, cannot be realized except under public ownership.

With regard to the power situation in

northern California, the governor asserted the Pacific Gas and Electric Company held a practical monopoly on generation and distribution. He accused the company of warring against the administration's public ownership program, which, he said, is based upon the Federal-supported Central valley project.

Report Demanded

STATE Senator J. C. Garrison of Modesto last month said he had telegraphed a protest to the state railroad commission against granting the Pacific Gas and Electric Company any extension of time to file its annual financial report.

The company had won two extensions, Garrison said, while all other public utilities had turned in their reports in compliance with the law. Information in the company's statement would be of value in the consideration of legislation, he advised the commission. Garrison said:

"The purpose of the request is to stall until the legislature adjourns. Then the PG&E will not have to inform the legislature how much it spent to defeat the revenue bond act at the last election, and what, if anything, was spent on other propositions and candidates."

Connecticut

Enfield Dam Defeated

IN an about face, administration leaders last month dropped the proposed Enfield power dam proposal and helped the House wreck the plan by a 98 to 36 rising vote. Death of the dam authorization in the House was interpreted as definitely killing it for this session of Congress and possibly longer. No effort to

revive it in the U. S. Senate was anticipated. House rejection of the dam came as a startling and wholly unexpected victory for Connecticut's four freshmen Republicans, led by Representative Miller of Wethersfield. The dam authorization was offered as an amendment to the omnibus rivers and harbors bill with a 14 to 4 favorable vote by the Rivers and Harbors Committee.

Illinois

Phone Case Appealed

THE state of Illinois and the state commerce commission on May 13th asked the United States Supreme Court to review a decision of the United States Court of Appeals permitting the Illinois Bell Telephone

Company to retain \$1,600,000 of unclaimed refunds.

The money was the remainder of a fund of about \$18,000,000 which was ordered returned to the telephone subscribers by the Supreme Court in 1934. Litigation over the refund extended over more than ten years.

Kansas

Municipal Plant Gains

THERE was a slight gain in municipal public utility plants in Kansas during 1938, ac-

cording to figures assembled by the Kansas League of Municipalities. The increase included five water plants, two gas plants, and one electric generating plant.

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Because the big power companies, through operation of their transmission lines, have been able to provide service at a cost far below manufacturing expense by smaller towns and cities, there has been a decided upturn in recent years of municipal light plant abandonments. Many towns have junked their public properties in order to secure the more attractive rates and improved service offered by the

private electric power and light industries.

In the matter of water systems, there is practically no private competition in Kansas, it was said. A few towns adjacent to gas fields have been supplying gas to local consumers. The total for the state, however, is but 19, while of the 339 cities owning some sort of public utility property, 323 of the number are water properties.

Nebraska

Franchise Appeal

CITY Attorney Calvin Webster received authority from the York city council last month to prepare an appeal from the recent decision of Federal Judge Munger at Lincoln, holding that the Iowa-Nebraska Light & Power Company has a permanent franchise in York.

Judge Munger dismissed the city's petition, which asked that the company's lines be removed from streets and alleys. The suit was filed originally in district court at York after negotiations with the company for purchase of its York properties fell through.

Another suit, in which the power company attacked the legality of the election held in York authorizing issuance of bonds to buy a municipal plant, was pending in Federal court.

Limits Public Power Units

LEGISLATION which forces federally sponsored power district projects within Nebraska to operate under the same conditions as existing private utilities became effective last month when Governor R. L. Cochran signed two bills recently passed by the state legislature.

One of the first broad moves by a state to curb activities of the Federal power program, the new legislation drew added significance from the fact that it had been approved by a state into which the PWA has poured nearly \$60,000,000 in loans and grants to finance public power and irrigation projects. With the approval of Secretary of Interior Ickes, the public power districts had been seeking to acquire by purchase virtually all the privately owned electric utilities in the state—a move

designed to provide an effective market for the power generated by the projects.

The legislation signed recently by the governor climaxed a bitter legislative fight between Nebraska municipalities and the supporters of the power districts. Advocates of the limiting legislation feared that unless it was enacted, the municipalities stood to lose very large tax revenues now derived from the private utilities. At the same time, it had become apparent that any statewide public ownership plan might entail a freezing of electric rates at present levels for some time.

One law provided that when a private utility property is acquired by a public power district, the district must contribute, in lieu of taxes, the same amount previously derived from the private facilities acquired. Municipal home rule regulation is also protected in such cities as Omaha and Lincoln by a provision that after acquiring private utilities, public districts will comply with local city ordinances. The laws further grant municipalities the option of purchasing utilities taken over by the districts.

Gas Bill Fails

THE Omaha city council recently failed to pass a resolution aimed at putting the council on record opposing L. B. 374, which would permit use of up to 75 per cent of natural gas in Omaha's gas supply. With Mayor Butler out of town, the resolution lost for want of a majority. The vote was three for and three against the proposal.

The Metropolitan Utilities District had estimated passage of the bill would result in a 20 per cent savings to residential users.

New York

Authority Recommends Program

THE New York State Power Authority recently recommended to Governor Lehman and the state legislature adoption of a program which would provide "potential competition" for private utilities and enable a reduc-

tion of rates to levels below those set by the TVA. The recommendations were contained in the authority's annual report for 1938.

They were centered around a general proposal providing for the construction of public power plants at the St. Lawrence rapids and on the Niagara river, and coordination of these

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hydroelectric developments with existing facilities through a statewide and state-owned distribution system.

Such a program, it was claimed in the report, would enable a drastic reduction in rates to a level below those of the Tennessee Valley Authority, and set as an objective, for instance, a figure of \$4.10 a month for 250 kilowatt hours in New York city, compared with the existing schedule of \$8 for a like amount of current. The TVA charge for 250 kilowatt hours is \$5. The report asserted that such a reduction in the present cost of power "could be achieved with full protection for all present and future private investment in the power industry serving New York state."

At the same time, however, the suggested program would "encourage" full compliance of the private utilities by a provision "enabling municipalities now or hereafter authorized by their citizens to distribute electricity on a public basis, to secure a fair share of the power as provided by the act. Thus, potential competition would serve to encourage the full cooperation of the private companies in the plan for progressive reductions in rates."

Using the national defense power program as an argument for the adoption of its proposals, the power authority declared:

"There is another consideration which must be weighed in determining the state's action on this program. The importance of bringing these great water power resources to the point of full utilization at the earliest possible moment in terms of any well-rounded program of national defense cannot be ignored."

The recommendations to the governor and state legislature were based, the report stated, on four years of extensive research by the authority. Essentially, the program would make available publicly owned power from the St. Lawrence to the extent of 1,100,000 horsepower, and an additional 787,500 horsepower from the Niagara falls on a basis which, it was claimed, "will result in the lowest cost power in the state."

Utility Authorized to Borrow

AUTHORITY was granted recently by the state public service commission to the New

York State Electric & Gas Corporation to issue a 20-year note for \$300,000 to obtain funds to construct 250 miles of rural electric lines in 40 up-state counties. The note is payable to the United States of America in 39 equal semi-annual instalments and is to bear 2.73 per cent interest annually.

The corporation was authorized to pledge as security for the note not to exceed \$400,000 of its 4 per cent bonds due in 1965.

The construction will make service available to 1,263 customers, or an average of 5.1 a mile of extension, and is expected to produce an annual gross revenue of \$50,184. There are 739 prospective farm customers and 524 non-farm customers.

Up to March 1st the corporation had received requests for extensions aggregating 1,430 miles of electric lines to serve 5,600 customers, exclusive of the construction to be provided by the note.

Senate Passes Unemployment Tax Bill

THE state senate recently passed and sent to the assembly the Stagg bill, continuing for another year authority for cities to impose by local laws taxes on public utility companies for the relief of unemployment conditions in the state.

Indications were that the assembly rules committee would report the Stagg bill favorably, and that the measure would be adopted by the state legislature without amendment and that it probably would be signed by the governor.

The measure would renew for the year July 1, 1939-June 30, 1940, the present law which expires on June 30th, providing for the imposition of a tax of 2 per cent by the state upon gross revenues of electric, gas, steam, telephone, telegraph, and traction utilities within the state.

The bill would also empower the various municipalities to levy an additional tax of one per cent upon utilities' gross operating revenues. Revenues raised by the state and local governments by the bill are applied to emergency unemployment relief expenditures by the state.

North Carolina

Damages Awarded

A 3-MEMBER commission awarded the Southern States Power Company \$1,800,000 on May 12th for properties in Cherokee county, condemned for and allegedly damaged by the Tennessee Valley Authority's Hiwassee dam project.

The commission ruled that the U. S. Government must pay the power company \$1,437,-

000 for 12,679 acres condemned for the project; \$253,000 for 8,300 acres allegedly damaged by the development; and \$110,000 for certain transmission lines and properties purchased by the power firm from the town of Murphy. Of the last amount, \$79,000 would be used to retire the remaining bonded indebtedness which the company assumed when it bought the properties for \$200,000, it was specified.

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The commission's appraisal was as of January 28, 1936, it was announced. Members said any claims for interest should be filed with the district court. These, it was said, if allowed would increase the total to more than \$2,000,000.

High Point Suit in Court

THE city of High Point recently filed with the clerk of the Federal court at Greens-

boro a transcript of the record in the suit brought by the Duke Power Company and others to restrain the city from proceeding with the \$6,000,000 Yadkin river power project.

The city has been seeking to have the suit transferred from the state to Federal court. Grover H. Jones, High Point city attorney, said the case now was pending in both the Federal and state courts as the result of the filing of the transcript.

Oregon

Commissioner Appointed

GOVERNOR Charles A. Sprague on May 12th accepted the resignation of N. G. Wallace, public utilities commissioner, and appointed Ormond R. Bean, Portland city commissioner for six years, to assume the \$7,500 post, effective June 1st.

Wallace, appointed utilities commissioner by Governor Charles H. Martin for the term beginning January 1, 1937, said in his letter of resignation that "in the present condition of my health, I feel that I can no longer continue my duties."

Wallace submitted a statement to Governor Sprague showing that his department had effected utility rate reductions of \$1,474,421 since 1935, including \$1,211,261 in electric rates, \$162,218 in telephone and telegraph rates, \$53,000 in gas rates, and \$46,942 in steam heating rates.

Demands Power Action

THE Eugene water board wants Bonneville power without delay. Increased consumption of electrical power in the city and the slowness of the Bonneville administration to take steps to provide requested power led the water board recently to authorize Secretary J. W. McArthur to write the administration and firmly demand immediate action.

The general tone of the board's discussion was that it "had played ball long enough and wanted material results" in obtaining power. At one time last winter the Eugene water board officials came to a tentative agreement on Bonneville rates with the representatives.

Dam officials, however, refused to consummate the agreement and promised to take action to present a new contract which they thought would meet with approval of the officials of Eugene's municipal plant.

Pennsylvania

Again Attacks Bills

Two senate bills making changes in the rural electrification laws of Pennsylvania were attacked on May 11th by John M. Carmody, Federal REA Administrator. In a telegram to Governor James he said the measures, if passed, would ruin the rural electrification work already accomplished in the state. The telegram said:

"If these bills pass, in all probability none of nine farm cooperative projects built to serve 17,000 farm families could ever extend their lines to other waiting farm families and no new projects could ever be created.

"With respect to claims that cooperatives sometimes injure private utilities, I wish to say that not only are REA borrowers already forbidden to take any customers from private companies but all borrowers in Pennsylvania buy all of the energy they use from those private companies at prices these private utilities set themselves.

"Despite your silence after my earlier telegram I cannot believe you will allow such wholly destructive legislation to be enacted without pointing out its ruinous effect upon the farmers of your state."

The bills would prevent cooperative companies from extending lines into an area, which a utility "stands ready" to serve. They would reduce from eighteen to three months the period for development of a cooperative system after maps have been filed with the state public utility commission.

PUC Member Confirmed

THE state senate last month confirmed Governor Arthur H. James' appointment of John Siggins, Warren manufacturer, to the state public utility commission. Mr. Siggins' confirmation, held up by the Democratic minority since February 27th, was part of a bipartisan deal whereby the Republicans agreed to drop pending ripper legislation.

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Approval of the Warren manufacturer was expected to lead to the prompt appointment of P. Stephen Stahlnecker to the second vacancy on the state commission. Mr. Stahlnecker, one-time secretary to former Governor Gifford Pinchot and a member of the commission when it was ripped out by the Democrats two years ago, supported Mr. James' election.

Thirty-four senate votes are required for confirmation of an executive appointment. The Republicans can muster only 26. It was this situation which enabled the Democrats to block the appointment for more than two months.

Tax Bill Blocked

THE state house of representatives last month defeated, 129 to 60, the motion of Representative Elmer J. Holland, Democrat, of Allegheny, to discharge the public utilities committee from further consideration of the Holland bill removing the local tax exemption for public utility real estate. If the motion had been adopted, the bill would have been brought to the floor for first reading.

Opponents pointed out that similar bills had been defeated in the house twice previously when the chamber was Democratic-controlled. Other dissenters emphasized that the yield from such taxation would be distributed inequitably.

PUC Appropriation Fails

DEMOCRATS in the state house waged a losing battle last month in an attempt to increase the public utility commission's 2-year appropriation. Governor James allotted \$1,900,000 to the Democratic-dominated commission and the appropriations committee pared this to \$1,400,000.

The minority floor leader, Herbert B. Cohen, sought to amend the general appropriation bill to increase the state commission's allotment to \$2,884,000. Cohen declared the fixing of the appropriation was "a most flagrant attempt to cripple the commission in its obligations to the people of Pennsylvania."

Cohen's amendment to increase the appropriation was beaten, 120 to 71.

Rhode Island

Tax Bill Signed

GOVERNOR William H. Vanderbilt last month signed the tax bill increasing from 2 to 3 per cent the tax on gross earnings of telephone, telegraph, and cable companies. This law also increases from 1 to 1½ per cent the

assessments on the gross earnings of electric utility companies, but contains a provision that the governor may, by proclamation, raise the increase to 2 per cent, if additional funds are needed.

The taxes imposed by this act will yield an estimated total of \$176,340.59, it was said.

South Carolina

REA Allotment Made

GOVERNOR Burnet R. Maybank recently announced that he had been informed of a \$224,000 rural electrification allotment for Laurens county on a cooperative program. The governor received a telegram from C. O. Falkenwald, of the Federal REA administration, notifying him of the allotment.

Similar programs now are being considered for Chesterfield, Lancaster, Orangeburg, Marion, and other counties. The process has been greatly simplified by the new South Carolina law, which clears the way for the cooper-

atives. Governor Maybank expressed the hope that farmers, county agents, and other interested groups and individuals would take the lead in organizing the REA projects in still other counties of the state.

Aiken county now has a well-organized cooperative program, which has made possible many miles of lines in rural areas. The difficulties encountered by Aiken in organizing without proper laws helped inspire the recent act of the state legislature. Representative Gyles, one of the moving spirits in putting through the legislation, said "it was one of the most constructive acts in recent years."

Tennessee

Power Deal Official

PURCHASE of Memphis Power & Light, gas and electric properties became official

last month when the city of Memphis, Memphis Power & Light, and TVA signed a contract closing the sale.

A special city commission meeting approved

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the sale and the purchase resolution was signed by Mayor Overton and Commissioners Davis, Williams, Boyle, and Picard for the city; W. W. Mallory, president; Thomas H. Allen, vice president; Ira J. Lichterman, commissioner for the light, gas, and water division; Henry H. Fowler, special counsel for TVA, and W. J. O'Brien, president, for Memphis Power & Light.

The contract calls for purchase of the electric distribution system, but not the generating plant, and the Memphis Power & Light gas system.

Tax Board Named

GOVERNOR Cooper last month announced the appointment of a 3-man committee to draft a tax program to replace revenues lost to governmental subdivisions through the sale of the Tennessee Electric Power Company to the TVA and municipalities.

Members of the committee are George Fort Milton, Chattanooga publisher; Will Gerber, Memphis city attorney; and Lon McFarland, attorney for the state public utilities commission.

Utah

Power Law Changed

REPEAL of an ordinance which amended the original power system ordinance of Provo city was effected recently by the Provo city commission, Mayor Mark Anderson said.

The original power ordinance, which provides for sale of bonds and the designing and

supervision of construction of a municipal power plant, remains in force as approved by vote of citizens in a special election in October, 1936, the mayor pointed out.

The ordinance which was voided would have changed the bond repayment dates, made the bonds callable, and extended the amortization period from fifteen to twenty years.

Washington

Seattle City Light Superintendent

EUGENE R. Hoffman, Seattle's new city light superintendent appointed by Mayor Arthur B. Langlie, took over his new position last month. Hoffman appeared at the city hall and filed his \$5,000 official bond, and was administered the oath of office by Carl Erlandson, deputy city comptroller.

Hoffman said he would push construction of Ruby dam forward as rapidly as possible. He said that at his suggestion the board of public works had reduced the time limit for completion of the Ruby dam three months. The time limit was to have been June 30th of this year. The board originally extended it nine

months, but recently cut the extension to six months.

Accepts New Post

R. W. Beck, recently deposed as head of the Bonneville engineering staff by Secretary of Interior Ickes, has been engaged as consulting utility engineer by the Grays Harbor Public Utility District.

Utility District Commissioner Oliver Morris said Beck would work out of the district's Aberdeen office, but that his work would not be on a full-time basis, as "Mr. Beck probably will work for other public agencies also."

Beck was to report for the commissioners on a survey of private power properties which the district may buy.

Wisconsin

Rural Co-ops Not Under PSC

RURAL electric coöperatives being organized throughout Wisconsin are outside the jurisdiction of the state public service commission, it pointed out recently to a group of Trempealeau county farmers who wanted the PSC to compel a coöperative to serve them.

Although already served by privately owned utilities, the group proposed to cancel such

service if the commission would force the coöperative to accept them as members and customers. The commission cited its lack of jurisdiction and added that Federal officials at Washington who do have authority in the case probably would deny the farmers' petition because of the Washington attitude that loans are made to coöperatives to bring electric service to farmers who otherwise might not be served.

Messages from "The World of Tomorrow" and The World of Today

to delegates and guests attending the
Seventh Annual Convention
of the
EDISON ELECTRIC INSTITUTE
and the
New York World's Fair, June 6 - 8, 1939

While you are at the
NEW YORK WORLD'S FAIR
Sent to the physical home July 25
WESTERN UNION
SOUVENIR TELEGRAM

WESTERN UNION

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

SYMBOLS

DL=Day Letter
NL=Night Letter
LC=Deferred Cable
MT=Cable Night Letter
Ship Radiogram

on telegram and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

4 TWS PAID 4=WUX TDN WORLDS FAIR NY 25 606P

EDITORS PUBLIC UTILITIES FORTNIGHTLY=

MUNSEY BUILDING WASHINGTON DC=

V WASHINGTON. D.C.

WILL YOU ACCEPT THIS STATEMENT AS AN EXPRESSION OF MY
SINCERE APPRECIATION OF YOUR GREAT INTEREST IN THE FAIR
AND CONVEY TO YOUR READERS THE FOLLOWING (QUOTE)
WELCOME TO THE FAIR. THE NEW YORK WORLDS FAIR IS NOT
ONLY A PLACE OF UNPARALLELED ENTERTAINMENT BUT IT IS
IMPORTANT ENOUGH TO ALTER THE COURSE OF WORLD HISTORY
FOR THE BETTER. IN THE CIRCUMSTANCES THE ATTENDANCE AND
APPROVAL OF THE GREATEST POSSIBLE NUMBER OF VISITORS
WILL IMPRINT THE LESSON OF THE FAIR UPON HUMAN
CONSCIOUSNESS AND GUARANTEE ITS SUCCESS AS A FORCE
IN BUILDING THE WORLD OF TOMORROW. THE FAIR HAS BEEN
PROVIDED WITH EVERY FACILITY FOR YOUR COMFORT AND I CAN
ASSURE ALL OF OUR VISITORS OF A MOST COURTEOUS RECEPTION.
(UNQUOTE)=

GROVER A WHALEN PRESIDENT NY WORLDS FAIR 1939 INC,

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

Annual Convention

EDISON ELECTRIC INSTITUTE

WALDORF-ASTORIA HOTEL
NEW YORK

June 6, 7 and 8, 1939

*TO DELEGATES AND FRIENDS OF
THE ELECTRIC UTILITY INDUSTRY*

We meet in our annual convention to exchange information as to ways and means for still further improving our service to the American people.

We welcome each of you in the hope that we shall gain from the meetings here something of value which will help us individually to meet our responsibilities throughout the years ahead.

C. W. KELLOGG

President, Edison Electric Institute

Consolidated Edison's Greeting To E.E.I. Convention Delegates

AS the New York World's Fair 1939 is being held on what might be called the home grounds of the Consolidated Edison Company of New York, Inc., we who furnish electricity, gas and steam in the New York metropolitan area take an especial interest and pleasure in greeting delegates to the 1939 convention of the Edison Electric Institute.

Since the days when Thomas A. Edison built his historic Pearl Street central station here, New York has always especially interested those of the electric industry. But this year in particular, thanks to the great exposition at Flushing, we have to offer an attraction which has certainly never been duplicated before. In the Fair electrical men will find utilized, on the grand scale, methods and mechanisms which they themselves have fashioned for the "World of Today" and the "World of Tomorrow." There they will find highlighted the accomplishments of the private industry of which they are a part.

VISIT Consolidated Edison's "City of Light," built conveniently near the Trylon and Perisphere on the Plaza of Light. Visit this exhibit, containing the world's largest diorama, because it dramatizes the contribution of public utility services to modern life in, we believe, unprecedented fashion. Higher than a three story building this block-long exhibit is a colored, lighted, animated architectural model of the New York metropolitan area. Motion, light, sound and a musical background will be synchronized with narration by means of electrical equipment, as in each twelve-minute performance the diorama presents the features of a twenty-four hour period in the metropolis.

You will recognize the Consolidated Edison building by its "water ballet" facade, an exterior faced with a 9,000-square foot wall of constantly changing water.

NEARBY on the Plaza of Light, marked by a 150-foot transmission tower, you will find the "Forward March of America" exhibit of the 175 companies comprising the Electric Utilities Corporation. Between the Flushing River and Rainbow Avenue you will find the same exhibitors' "Electrified Farm," demonstrating more than 100 practical applications of electricity. On the Avenue of Patriots the gas industry's exhibit will interest utility men with its Court of Flame and its All-Gas Home of Tomorrow.

At the Consolidated Edison exhibit electrical men may find of particular interest the manner in which one company has set forth—in simple, dramatic form so that he who runs may read—the intricacies of operating a modern utility enterprise. Taxes, purchasing requirements, investment matters, revenue dollar analyses, cost comparisons and employe activities are treated in a sequence of display sculptures which in effect comprise a three-dimensional report on company operations. Electric, gas and steam production are dramatized in similar fashion.

ALL of the electric energy to be used by the Fair will be furnished by the Consolidated Edison System companies. The connected load is estimated at 60,000 kilowatts and the first year's consumption at 115,000,000 kilowatt hours. Energy will be delivered to substations of the Fair for distribution by the Fair Corporation.

For some months the Waterside generating station at First Avenue south of 40th Street has been open for guided tours by the public, and delegates are cordially invited to include this trip in their schedule of activities. To arrange such a visit, made pleasant by well-informed company guides, telephone Consolidated Edison—Stuyvesant 9-5600, Extension 115. We will be gratified if in any way we can help make the convention delegates' stay a pleasant one.

OSCAR H. FOGG, *Vice-Chairman.*

WE BID YOU WELCOME

• TO LONG ISLAND •

Home of the World of Tomorrow

- When you visit The New York World's Fair, plan also to spend a few days of relaxation amid the charm and comfort of historic Long Island.
- You will enjoy its broad, sandy beaches swept by cooling breezes from across the broad Atlantic—its "down east" communities that still retain their colonial atmosphere—the many miles of beautiful parkways—and the comfortable tourist homes and hotels.
- A few days spent on Long Island after the hustle and bustle of the Fair will give you a fine "pick-up" before your trip home.

LONG ISLAND LIGHTING COMPANY

AND SUBSIDIARY COMPANIES

NASSAU & SUFFOLK LIGHTING CO.
KINGS COUNTY LIGHTING CO.

QUEENS BOROUGH GAS & ELECTRIC CO.
LONG BEACH GAS CO., INC.



NECHES Station of Gulf States Utilities Company at Beaumont, where general offices for the company's Texas Division are located. Louisiana Station, of similar electric capacity, is at Baton Rouge, where Louisiana Division offices are.

IN GOOD times and bad, as a matter of daily routine, we, as individuals and as a corporation, in every contact with a customer try to act exactly the way we certainly would act if there was a competing electric utility just across the street. If we enjoy the good will of the great majority of those we serve—and there is much evidence that we do—it is due in a large measure to this “competitive attitude” in all of our dealings with the individual customer.

GULF STATES UTILITIES COMPANY



JUNE 8, 1939

772

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Per Capita Residential Electricity Use is Highest in Western Deserts

AN unusual part has been played in the winning of Western desert and mountain areas to a modern mode of life by The Nevada-California Electric Corporation, whose principal offices are in Riverside, California.

Organized more than 30 years ago for the purpose of bringing hydroelectric power from the High Sierra Nevadas over the White Mountains into Nevada to serve Tonopah, Goldfield, and other mining camps, the Company through the years has also extended its transmission lines over hundreds of miles of desert waste and arid valleys in Eastern and Southern Cali-

ornia, Arizona, and Old Mexico, to give service to the development of latent mineral deposits, which have grown into great industries; to reach other areas, which have grown from cactus covered valleys into irrigated gardens; to serve small towns and villages, which are now becoming cities; to reach into pine-clad mountains, which have opened vacation resorts; and to change parched waste areas below sea level into magnificent fruit and vegetable producing districts of the Nation.

At the beginning, when the founders of this Company projected a hydroelectric transmission line, then the longest in the world, over hundreds of miles of country sparsely settled, expecting for the coyote, the horned toad, and the rattlesnake, they were pronounced as "visionary." Through the years, however, their dream has become a reality with the growth of a small company producing only 5,501,251 kilowatt-hours of electrical energy in 1906 to one with a total production of 461,315,697 kilowatt-hours in 1938.

And, in the intervening years, it has made possible the establishment of new mineral industries; has developed intensive irrigation farming; and has increased the planting of unique date gardens, orange, lemon, and grapefruit groves, vineyards, and scores of other crops new to a desert.

The natural inference from this would be that the principal power load of a company organized

to serve such a wide variety of industries would be predominately agricultural and industrial. It is rather startling, therefore, to note that the Annual Report of the Corporation to its

Stockholders, published in April of this year, records an average consumption by the residential customers of the Company over its entire System in 1938 of 1,370 kilowatt-hours, as against a national average of 850 kilowatt-hours.

THE people of the Mojave and Colorado Deserts have become electrically conscious. They come nearer to the per capita saturation point in the purchase and use of electrical appliances than do the people in the densely populated metropolitan centers. The farmer who uses electric power for pumping underground water to the surface to irrigate his farm, also has in his home an electric refrigerator, water heater, range, washer, ironer, and most of the smaller appliances, in addition to a "desert cooler" for air-conditioning. The vacationists and winter residents of Palm Springs, La Quinta, and similar famous new winter resorts, want electricity for all of the creature comforts they enjoy in the city and the permanent residents of the desert will accept nothing less.

An electrical view of our "World of Today"

• It now costs the average American household only \$1.71 to light its house or apartment by electricity for a month (using 40 kilowatt hours). If this home had to use candles, it would have to pay \$346.65 a month for an equivalent amount of light... would have to burn 5,778 candles, totaling over a half ton in weight.

\$346⁶⁵

\$1⁷¹

FOR less than a dollar a week the average American city home is lighted by electricity and vacuum-cleaned; its food is refrigerated and it is supplied with ice; its radio is operated, its toast and coffee are made and its electric fan is run in summer. A single dollar buys all this service. No other dollar in the family budget buys nearly so much.

What has made it possible for this country to enjoy cheap and efficient electric service?

The answer is *private enterprise*. It rewards individual initiative. It encourages inventive genius and efficient operation. It induces investors to supply capital.

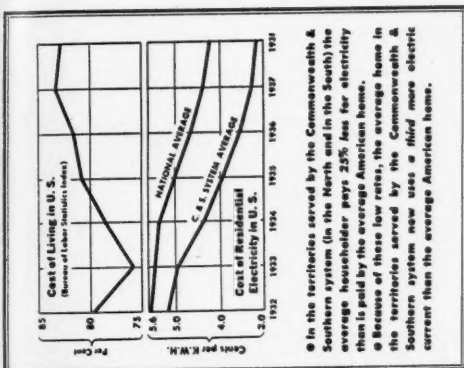
Operating as private enterprises, our public utilities for half a century have given American homes and industries progressively *more for their money*. To continue to reduce rates and expand their service, the utilities constantly need to obtain new capital from investors.

UNEMPLOYMENT — It has been estimated that starting now the utilities could spend, within a five year period, five billion dollars *additional* for new equipment... if the money could be obtained from investors.

This, alone, would give new, steady jobs at good wages to approximately 400,000 workers, principally in our heavy industries where sustained recovery must be started.

There are about three million people on "work relief"... another million and a half on "general relief"... in addition, over six million are also looking for steady jobs. Obviously any barriers holding back renewed activity by utilities, or any other American industry, should be quickly removed.

Investors would supply this money, and more, if the Government would define *by agreement* the specific areas where it intends to force the sale of private utilities by subsidized competition. Then, investors will be able to judge which utility properties are to be safe from threats of confiscation.



The Commonwealth & Southern Corporation

MICHIGAN • ILLINOIS • INDIANA • OHIO • PENNSYLVANIA

TENNESSEE • ALABAMA • GEORGIA • FLORIDA • MISSISSIPPI • SO. CAROLINA

Our Contribution

THE past decade has been one of economic and political strain throughout the world. Many business enterprises have been forced to reorganize or to curtail operations in order to survive.

Public Service Electric and Gas Company, a subsidiary of Public Service Corporation of New Jersey, notwithstanding these adverse conditions, has continued, as in the past, to make such extensions and improvements to its plant equipment as are necessary to keep ahead of the growing requirements for services to its many customers.

In the last few years approximately \$12,000,000 have been spent by the company for major electrical plant improvement. Another \$12,000,000 will be spent this year for a 100,000 kilowatt turbine generator and two high pressure, high temperature steam boilers at the Burlington Generating Station, including a transmission line carrying two 132-Kv circuits to the Trenton Switching Station.

An additional generating unit of 50,000 kilowatts was installed at Essex Generating Station which, in addition to boilers and other new equipment at the station, cost about \$7,500,000.

A mercury turbine unit of 20,000 kilowatt capacity at Kearny Generating Station cost approximately \$3,000,000.



THE contribution of Public Service has been and will continue to be for the economic welfare of New Jersey and for the comfort of its inhabitants. Past problems have been met squarely and without fear. The future is faced with confidence.

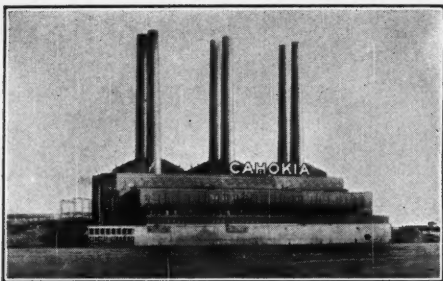
Public Service Corporation of New Jersey
and its subsidiary operating companies



CITY OF THE FUTURE

A part of Pacific Gas and Electric Company's huge diorama at the 1939 Golden Gate International Exposition, San Francisco.

Every phase of modern utility service with its illimitable future possibilities—the brilliance of unrivalled spectacular and colorful lighting, the romance of the gas industry, stream-lined transportation and communication service—are among offerings by utilities of the West.



Cahokia Steam-Generating Plant

THE PLAN AND THE PERFORMANCE

St. Louis—like most American cities—was founded and had grown populous long before the advent of electric power service. The selection of its site had been determined by factors having little to do with the yet unknown requirements of electric power supply. But if the city was to keep its place among its sister cities, an adequate power supply must be forthcoming.

The business enterprises responsible for the building of modern power systems were faced not only with the fact that the location of the necessary natural resources—coal and water—had been fixed by Nature, but also with a distribution of population that was equally firmly established. Their problem, therefore, was to locate power plants in such a manner as to make the most of each situation...to make full and efficient utilization of available coal and water, yet to be close enough to where the people live to avoid high costs in transmitting power to them.

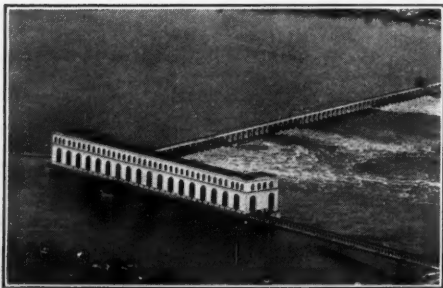
The St. Louis area furnishes an example of the careful planning which has resulted in the ample and economical power supply which is at the Nation's disposal today. Power plants have been so located in the St. Louis area as to give the user of elec-

tricity the advantage of Illinois' plentiful coal resources; of the Mississippi's unlimited condensing water supply at St. Louis; of the same river's power-generating ability at Keokuk, 150 miles to the north; of the power of Ozark streams obtained by impounding the Osage River to form the Lake of the Ozarks in central Missouri; of the reliability resulting from using both water and coal as power sources; of the further dependability provided by locating the two hydro-electric plants in separate drainage areas as insurance against drought; and of the economy and efficiency resulting from a complete coordination of all these power sources into a unified, harmonious whole.

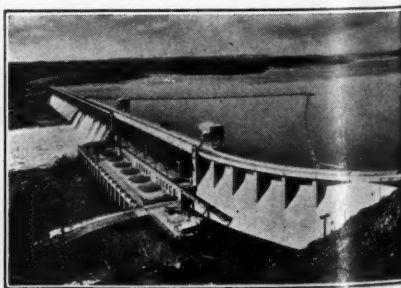
This is the long-range planning which—as practiced in the St. Louis area by the Union Electric System and throughout the nation by similar business enterprises—has placed the American people ahead of all others in industrial efficiency and advancing living standards.

UNION ELECTRIC COMPANY OF MISSOURI

ST. LOUIS, MISSOURI



*Hydro-Electric Station at Keokuk, Iowa,
on the Mississippi River*



*Bagnell Dam, Osage Hydro-Electric
Station, and Lake of the Ozarks*

This Is What We RETURNED

During 1937
to the Territory We Serve:

We paid in Wages and Salaries in 1937, including construction	\$4,895,125.21
We paid in Taxes in 1937	2,174,862.01
We bought from Montana Business Firms in 1937 ...	1,682,177.58
We paid in Dividends to Stockholders in Montana, 1937	723,906.00
Total	<u>\$9,476,070.80</u>

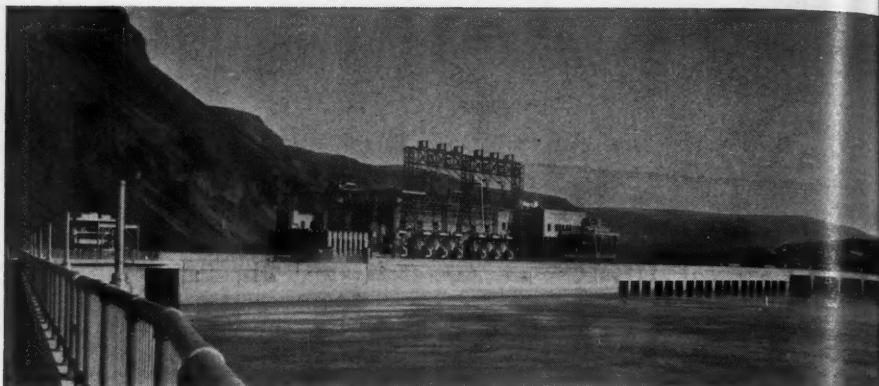
.. and GOOD ELECTRIC
SERVICE AT LOW
RATES

THE MONTANA POWER COMPANY

YOUR ELECTRIC



RATES ARE LOW



General View of Rock Island Dam—the point of embarkation for Columbia River Salmon on their truck ride to tributary streams.

Helping Columbia River Salmon Reach Spawning Grounds

PUGET Sound Power & Light Company is cooperating with the Federal Government in the program to solve the problem, created by the construction of the Grand Coulee Dam, of maintaining the salmon runs in the Columbia River.

At the Company's Rock Island Dam and hydro plant—the first one constructed on the Columbia River—the salmon and other migratory fish are trapped, and transported by truck to hatcheries and spawning grounds on the tributaries of the Columbia enter-

ing into the river below the Grand Coulee Dam.

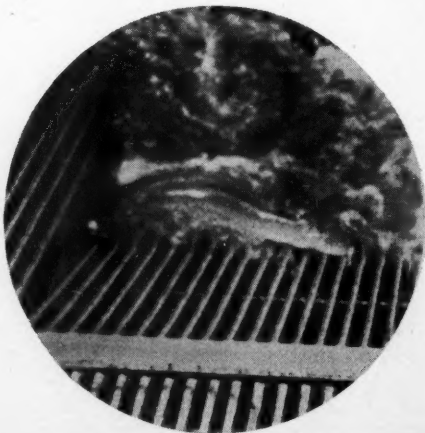
Puget Sound Power & Light Company is anxious to continue to cooperate with the Federal Government and pledges its aid in connection with national defense problems and the proper and economical marketing of Bonneville and Grand Coulee power.

FRANK McLAUGHLIN,

President.

Puget Sound Power & Light Company

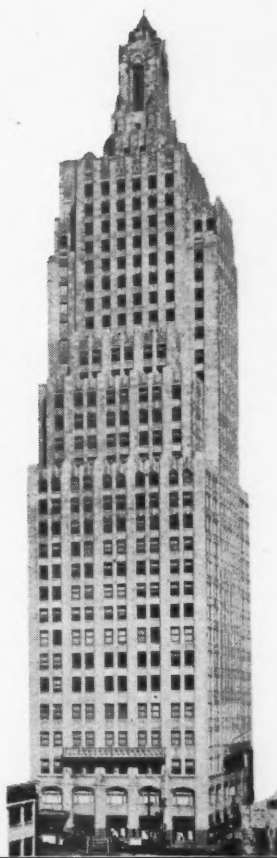
A home-coming salmon displays surprise just before it is plunged into an ice-cooled truck operated by the Federal Bureau of Fisheries.



GREETINGS

*To Members
of The Edison
Electric Institute
Convention...*

This company extends
its sincere greetings and
best wishes to the del-
egates and guests at the
Edison Electric Institute
Convention in New
York City, June 6 to 8



KANSAS CITY

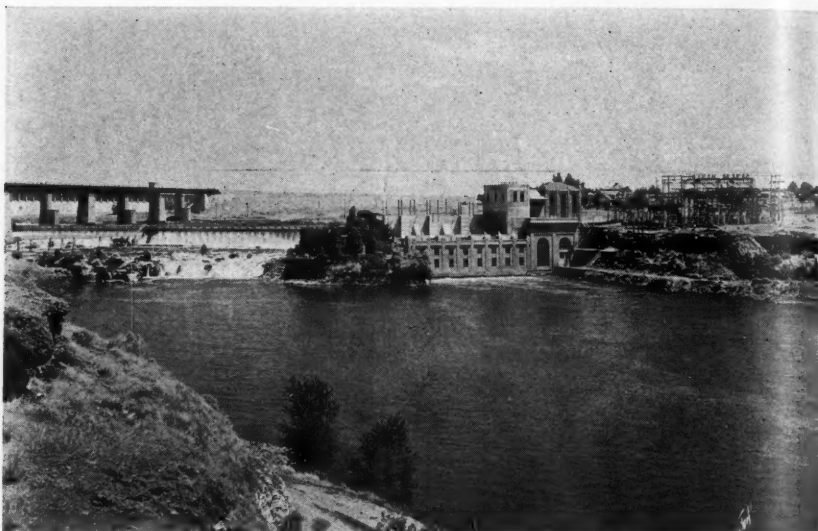
POWER & LIGHT COMPANY

KANSAS CITY, MISSOURI

*The Development and Progress of the Electric Industry
in Southern Idaho and Eastern Oregon has been*

CO-ORDINATED

with the use of water for irrigation



The Idaho Power Company Plant at American Falls is an example of co-ordination between the interests of Hydro-Electric Power and Irrigation

Water resources of the great Snake River valley have been used for two vital purposes—to develop hydro-electric power, and to irrigate the fertile acres of this agricultural area. Over a period of 22 years these two interests have gone hand in hand in a spirit of co-operation and co-ordination.

Today Idaho Power Company serves 50,000 domestic customers in a sparsely settled territory 400 miles in length. These customers use nearly twice as much electricity as the national average at rates that are 33 per cent below the average.

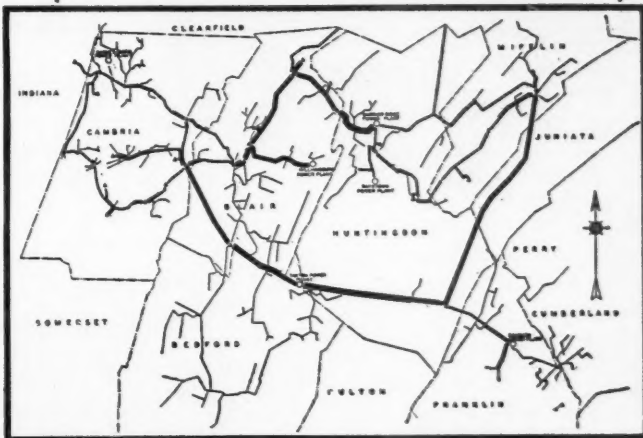
Rural electrification has progressed continuously until today Idaho Power Company

serves 75 per cent of the farms in its territory. Public acceptance of electrical appliances has been built to a high degree. Saturation of electric ranges is 53.5 per cent; of electric water heaters 22.2 per cent; of electric refrigerators 50 per cent.

Idaho Power Company has developed its facilities in pace with community and state progress. As a pioneer it has continually worked to stimulate the industries and activities beneficial to the people it serves.

IDAHO POWER
Electricity Does So MUCH—Costs So LITTLE!

SERVING 4500 SQUARE MILES IN CENTRAL PENNSYLVANIA



To those who have made possible — both financially and through personal effort and ability — the spectacular and magnificent lighting effects at the New York World's Fair of 1939—we pay tribute.

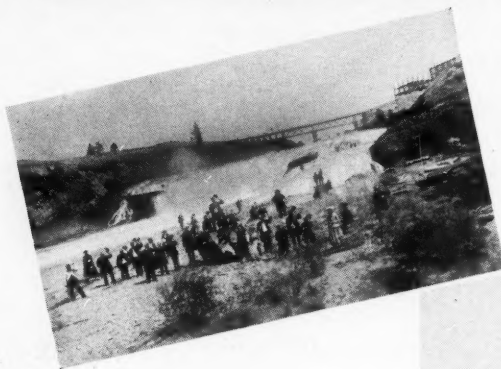
Since February 10, 1910, when it was organized the Pennsylvania Edison Company has grown until it serves 298 communities in the central part of Pennsylvania, with an estimated population of 204,300, and having 64,578 electric and 3,418 gas customers.

The Pennsylvania Edison system as shown above has 543 miles of transmission lines and 1106 miles of distribution lines. There are six generating stations with a total capacity of 80,200 KW and 39 major substations. This system covers a rich agricultural and industrial district which includes mines, steel mills and factories and provides light and power for homes and transportation.

PENNSYLVANIA EDISON COMPANY

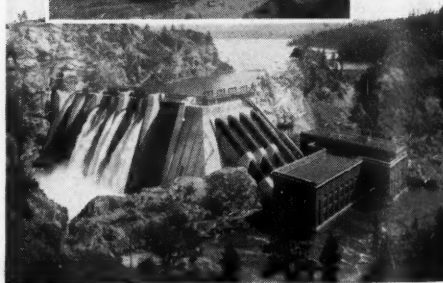
1200 11TH AVENUE, ALTOONA, PENNA.

WHEN ELECTRICITY WAS YOUNG IN THE INLAND EMPIRE



1889

Typical of western electrical development, early days of the Washington Water Power Company were not elegant as two of these pictures reveal. Spokane was a village, a trading post; the power site on turbulent Spokane River, newly harnessed, was an amazing experiment.



TODAY

Today marks fifty years of continuous electric service under the company's incorporate name. Today 66,000 residential and farm customers enjoy electricity at an average cost of 2.22c per KWH—half the national average. Today, under private initiative, this territory claims the highest acceptance of electric service of any locality in the U. S. A., the residential 12-month average in March, 1939 being 2011 KWH.

THE WASHINGTON WATER POWER CO.

THE CONNECTICUT LIGHT & POWER COMPANY

HEADQUARTERS, HARTFORD, CONN.

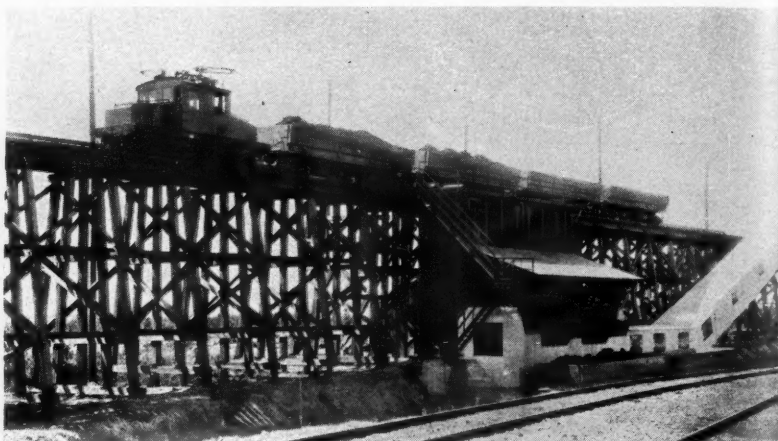


CONNECTICUT — WHERE GRACIOUS LIVING JOINS WITH
INDUSTRY AND COMMERCE IN SCENIC SURROUNDINGS

SUPPLIES ELECTRICITY DIRECTLY OR INDIRECTLY
TO 74 PER CENT OF CONNECTICUT'S AREA . . .
GAS SERVICE TO 23 PER CENT OF CONNECTICUT'S
GAS-USING HOMES

*The Experiences of Yesterday
The Realities of Today
Forerunners of*

THE WORLD OF TOMORROW




Pictured is a typical iron mining operation in Northern Minnesota where more than half of the Nation's Iron Ore is produced.

Electric Power is an essential factor in ore mining because of its low cost dependability.

Iron Ore and electricity will play important parts in the World of Tomorrow.

**Minnesota Power & Light
Company**

General Offices: Duluth, Minnesota



You're Invited

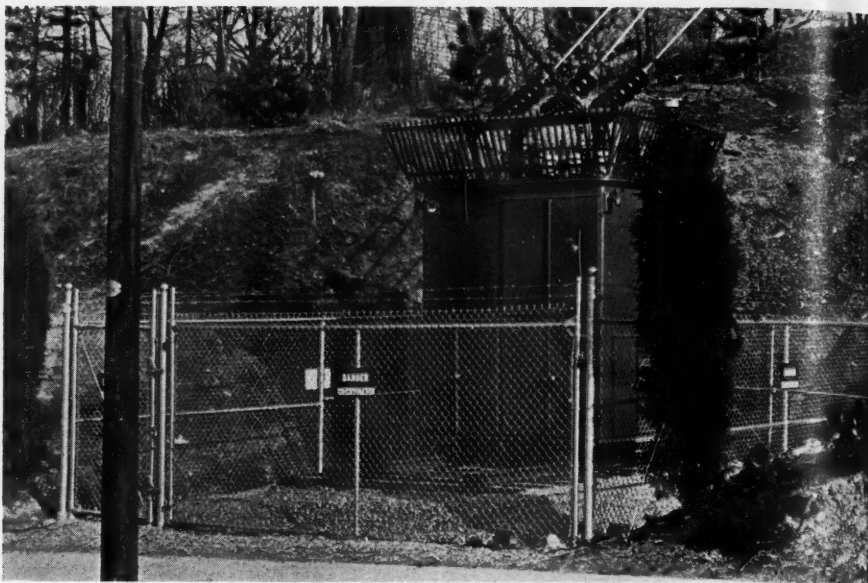
We join the citizens of this Intermountain Empire in extending to you, Mr. and Mrs. Traveler, a cordial invitation to stop over in Utah on your way from Fair to Fair and enjoy our scenic wonders and our hospitality.

We have much to offer you in beauty of scenery in mountains, lakes, forests and canyons, as well as recreational facilities and points of historic interest.

Splendid hotel accommodations are at your disposal in Salt Lake City and Ogden.

Nowhere in the entire country will you enjoy a more delightful visit than here in our "Center of Scenic America."

UTAH POWER & LIGHT CO.
SALT LAKE CITY



Mobile substations of this type enable Philadelphia Electric Company to meet special requirements.

This Portable Age!

IN THE operating life of an electric utility company it becomes necessary at times to carry the mountain to Mohammed. Philadelphia Electric Company engineers did just that.

There had long been a pressing need for a high-voltage substation unit that could be made available on short notice to meet special requirements of a more or less temporary character, or as an aid to regular service. Necessity suggested a mobile unit which could be relocated at will to satisfy changing load characteristics—or for other like purposes.

A 15-ton substation is not exactly a vest-pocket plaything—and yet the de-

sired ends could not be met unless such a unit lent itself to requisite portability.

UNITS meeting these specifications were designed and are now in use in Philadelphia Electric territory. Lacking no feature of a standard substation, their compact and rugged design makes it easily possible to move them with the aid of heavy-duty trailers, at a minimum of time and effort, from location to location, as the needs arise.

These portable “subs” already have more than justified the claims which led to their manufacture and formal adoption.

PHILADELPHIA ELECTRIC COMPANY

JUNE 8, 1939

788

'A Private Agency For The Public Good'

THAT term might well be applied to progressive electric companies in the United States today. There are many of them. Through their efforts the nation has benefited from a network of power plants and transmission lines supplying dependable service at moderate cost. They supply this service to cities, towns, hamlets, and

farms, and pioneered in the extension of this service to remote places.

Most of them have been active in the civic, cultural and industrial development of the areas which they serve and all of them share a large tax burden so that the functions of local and national government may be carried on.

In the case of Alabama, State and other local taxes paid by this Company alone, are enough to pay*:

About $1\frac{1}{2}$ times the State's share of expense of operating Alabama's institutions of higher learning, or

Nearly $1\frac{1}{2}$ times the cost of the State's extension, vocational and miscellaneous educational work or

More than $\frac{1}{5}$ of the State's share of elementary and high school expense, or

Nearly $\frac{1}{5}$ of State highway expense, or

More than $\frac{1}{2}$ of the expense of State charities, or

More than 6 times the amount spent on health and sanitation by the State, or

Almost 4 times the amount necessary for debt service on the Alabama State Docks, or

About $\frac{3}{4}$ of the amount needed to pay interest on the State's bonds.

Similar contributions to public welfare are made by utility companies the nation over, who may also have the good fortune of having many of their

customers refer to them as "private agencies for the public good."

THOS. W. MARTIN,
President

*Note: Comparisons made are based on State expenditures as given in the State Auditor's Report for 1937.

ALABAMA POWER COMPANY

BALTIMORE A LEADER — IN THE FORWARD MARCH OF AMERICA

THE Electric Industry has appropriately chosen as its slogan for the New York World's Fair the "Forward March of America."

Baltimore is in the forefront of this march. Its industrial development in the last thirty years has been extraordinary as to volume and diversity of output.

The value of manufactured products increased from \$250,000,000 in 1909 to

\$926,000,000 in 1937—an advance 270%, as compared with an increase 203% in the same index for the nation as a whole.

The home of the swift-sailing "Baltimore Clippers" and of the first railroad in this country, Baltimore is now a leader in the field of air transport, with the first American terminal for trans-Atlantic air commerce and the largest single airplane factory in the world.

Baltimore has the country's

- Largest tidewater steel plant.**
- Largest copper refinery.**
- Largest industrial alcohol plant.**
- Largest maker of closures for glass containers.**
- Largest producer of spices.**
- Largest producer of bichromates.**
- Largest straw hat factory.**
- Largest production of fertilizers and superphosphates.**
- Largest production of tin cans.**
- Largest plant devoted exclusively to the production of stainless steel.**
- Largest meat packing plant on the Atlantic seaboard.**

An adequate and reliable supply of electric energy at low rates has been an important factor contributing to Baltimore's remarkable industrial growth. The territory has the advantage of unusual diversity in sources of power supply to the integrated system. Hydro power generated on the Susquehanna River has been received since 1910 from the Pennsylvania Water & Power Com-

pany, and since 1931 from the San Francisco Harbor Water Power Corporation.

The first city on the Atlantic seaboard to receive an abundant supply of hydro power, Baltimore has directly benefited from pioneer work in the coordination of hydro and steam electric generation and from extensive interconnections with neighboring electric systems.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

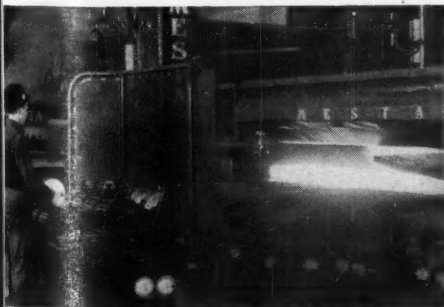
POWER in PITTSBURGH grows with Steel



Duquesne Light Co. Construction Crew doing maintenance work on 66 Kv. lines . . . one of the crews that rendered service in New England States hurricane area last year.

IN the Pittsburgh district, the Carnegie-Illinois Steel Corporation has recently completed its new Irvin Works, one of the largest and most modern hot strip mills in the entire world. It is completely electrified, and all electric energy is supplied by the Duquesne Light Company. It is one of the biggest and most outstanding industrial customers of any utility company anywhere in the country.

The Duquesne Light Company takes pride in rendering service to this gigantic industry . . . and particularly in the knowledge that when such a large industrial concern purchases power from a central station, it does so only after thorough consideration of all factors such as . . . cost, reliability, initial investment, future expansion, and flexibility.



Irvin Works 80" Continuous Hot Strip Mill

DUQUESNE LIGHT COMPANY



THE LION AND THE TIGER

It seems hardly fair to concentrate just on the World of Tomorrow, inspiring as it is for, after all, men did merit applause for their engineering and mechanical accomplishments even 100 years ago. There was plenty of romance in the huffings and puffings of the Lion and Tiger as they chugged through the Maine woods in 1839 hauling lumber and "passengers free at their own risk."

And just 50 years ago, in 1889, a pioneering group of citizens built in Bangor, the second Electric Street Railway in the U. S. A. Inventive men, these Yankees. Right up with the times, in pace with tomorrow but with a comfortable admixture of good, plain, everyday, sensible living in the fine old state of Maine. Of course, the electric service in the 73 communities we serve is as modern as engineering ingenuity can provide.

When you're all tired out after doing the Fair, come to Maine and recuperate. Can we help you make your plans? The coastline, mountains or lakes? We'll guarantee a vacation you'll never regret or forget.

BANGOR HYDRO-ELECTRIC COMPANY

Main offices, 31 State Street
BANGOR, MAINE

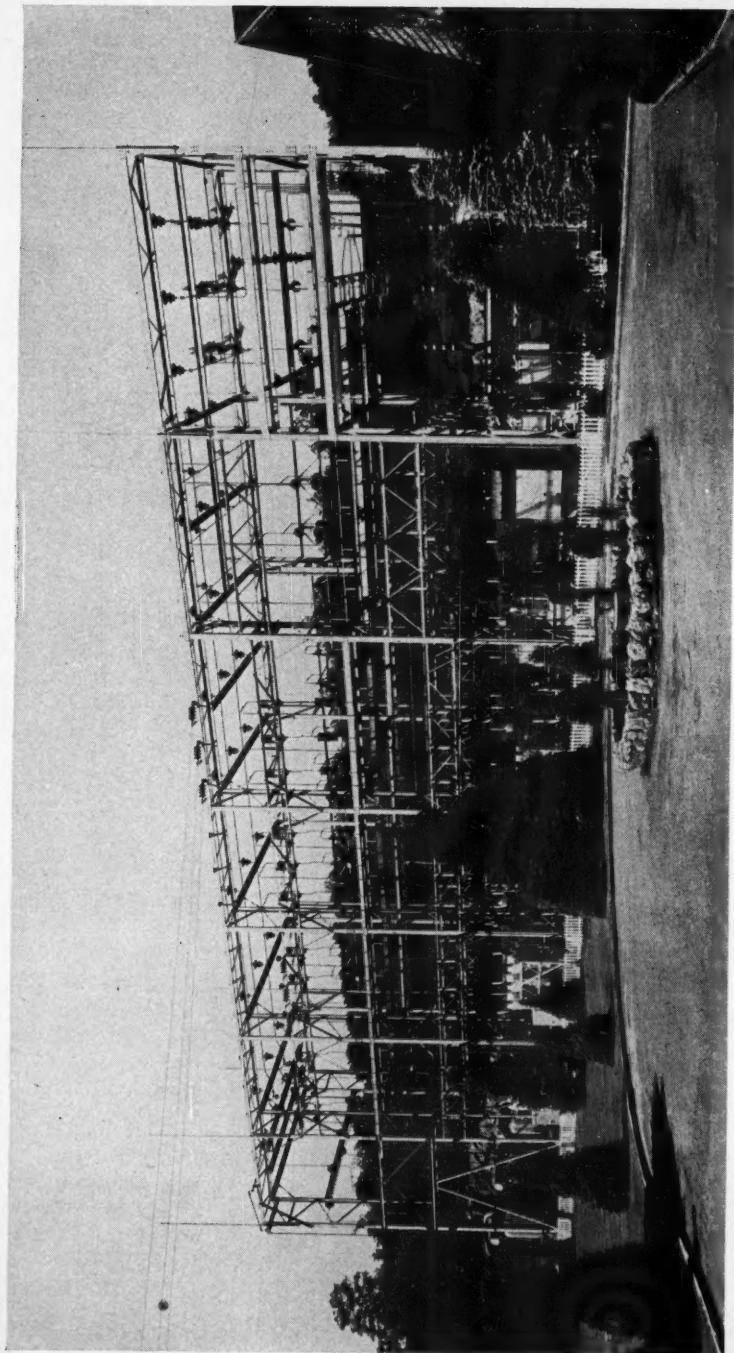
GOOD LUCK

...and Come To See Us

WE send hearty good wishes for a successful meeting to delegates and guests attending the annual convention of the Edison Electric Institute at the New York World's Fair.

And we cordially invite you all to come to Kentucky this summer, to visit our historic and scenic places, and to enjoy our hospitality.

KENTUCKY UTILITIES COMPANY
and Associated Companies



Orange and Rockland Electric Company's Main Substation at Monroe, N. Y.

THIS substation is used to receive panics and to distribute 11,000 and 33,000 volt energy over transmission lines and Rockland Electric Co.; also to distribute 2,300 and 3,000 volt energy over distribution lines.

Heads Up!

Statistics reported by the Detroit Board of Commerce might well be used to change the course of pessimistic talk. Too much has been said about the bad effects of strikes and bank closings and other unhappy memories.

At a recent meeting of business men sponsored by the Board the fact was cited that 127,000 more men were employed in Michigan in 1937 than during the peak-of-prosperity year, 1929. Michigan, formerly rated fifth among industrial states, has risen to third place. Detroit is Michigan's leading industrial city.

EDITORIAL—DETROIT NEWS
MARCH 25, 1939

DETROIT is still growing! In the face of decline in other areas, its population has increased 10% in ten years, climbing from

1,509,425 in 1929
to 1,650,000 in 1938

Bank deposits in Detroit on January 1, 1939 totaled \$760,333,154, approximately 140 million dollars more than on January 1, 1933. An average of one successful new industry has been established each week in Detroit, during all the ten years of national depression. In 1929 wage earners in the Detroit area were paid \$511,474,000, and in 1937 that figure had grown to \$648,515,000, an increase of 137 million dollars. And electricity has played its part in the growth of South-eastern Michigan:

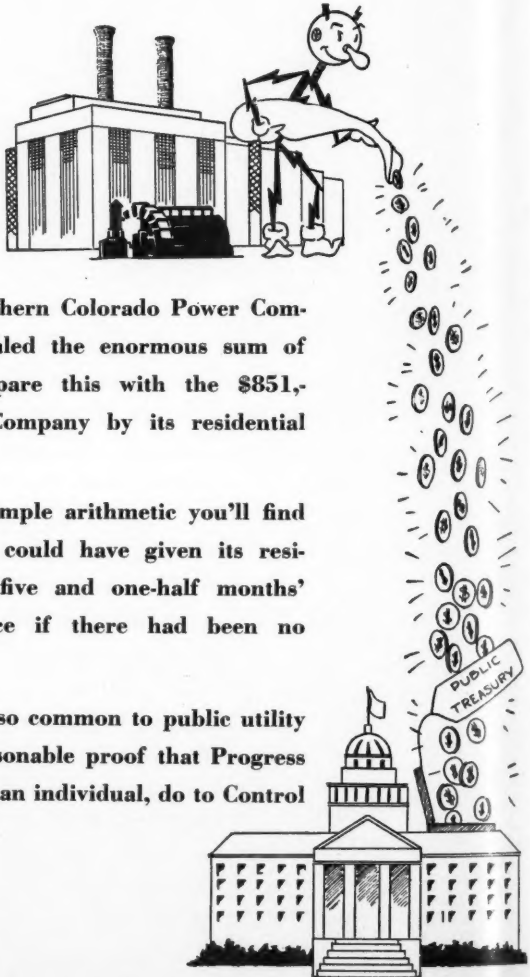
1922	4,600 kilowatthours per industrial worker
1927	7,000 kilowatthours per industrial worker
1932	9,100 kilowatthours per industrial worker
1937	11,000 kilowatthours per industrial worker

Detroit has been called the most important manufacturing center in the world. And Detroit is still growing! The Detroit Edison Company.

5½ Months' Free Electric Service... Without Taxes

IN THE DISTRICTS SERVED BY
SOUTHERN COLORADO POWER COMPANY

*Maybe you think
this couldn't be pos-
sible, but let's look
at the record . . .*



Taxes paid by Southern Colorado Power Company last year totaled the enormous sum of \$394,633.14. Compare this with the \$851,437.04 paid the Company by its residential electric customers.

By doing a little simple arithmetic you'll find that the Company could have given its residential customers five and one-half months' free electric service if there had been no taxes to pay.

A condition that is so common to public utility companies it is reasonable proof that Progress lies in what You, as an individual, do to Control Taxes.

FIRST PRIZE AWARD



Progressive Safety on Vepco!

When the Virginia Electric and Power Company entered the Public Utilities Safety Contest sponsored by the National Safety Council in 1930, at the end of the first year's competition its record was 9.5 lost-time accidents per million man-hours worked. It rated 9th place in the contest.

At the end of the next year, it came up to 6th place, and in the two succeeding years it held 4th place. At the end of the fifth year it advanced to 3rd place and in the sixth and seventh years it stood 2nd.

At the end of the eighth year—the competition year which ended June 30, 1938,—with a record of 2.4 lost-time accidents per million man-hours worked, it rose to 1st place and was declared—winner!

Nothing spectacular, but a year-by-year improvement resulting from the steady and intelligent application of Safety methods and practices. A record of which we all are very proud!

VIRGINIA ELECTRIC AND POWER COMPANY

ELECTRIC COOKING AND WATER HEATING

*now available
for the very
modest income
customer.*



*A Complete Cooking Unit
—roaster, broiler and hot
plate.*



*The Kitchen Service Water
Heater — hangs handily
over the sink.*

**This company has led in the development
of these easy-to-buy low-cost-to-use appliances**

CENTRAL HUDSON GAS & ELECTRIC CORPORATION
"Serving the Central Hudson Valley"



To Fellow Workers

in the

ELECTRICAL INDUSTRY



Gathered here at this time, you are, in a large measure, responsible for many future developments in America's great electrical industry. Your unselfish efforts here will long be remembered.

We extend hearty greetings to our fellow workers. We are sincere in our belief that this Edison Electric Institute conference will supply many rich and valuable experiences to guide your future efforts.

Good Electric Service Doesn't Just Happen

NEBRASKA POWER COMPANY

IN SOUTH CAROLINA

RECOGNIZING that "Public Service is a Public Trust" the company has for many years devoted its efforts not only to serving its customers efficiently, but has also sponsored an aggressive program to promote community and industrial growth. Among other things, this program has embraced

● RURAL ELECTRIFICATION

INDUSTRIAL DEVELOPMENT

Studies relating to fundamentals such as Legislation—
Taxation — Natural Resources — Raw Materials —
Markets, etc.

Number new plants located in territory served
past 10 years 83

COMMUNITY ADVERTISING FOR

Homeseeker — investor — tourist — industrialist —
agriculturist.

DAIRYING

CATTLE AND HOG RAISING

CANNING—VEGETABLES AND SEAFOOD

POULTRY RAISING

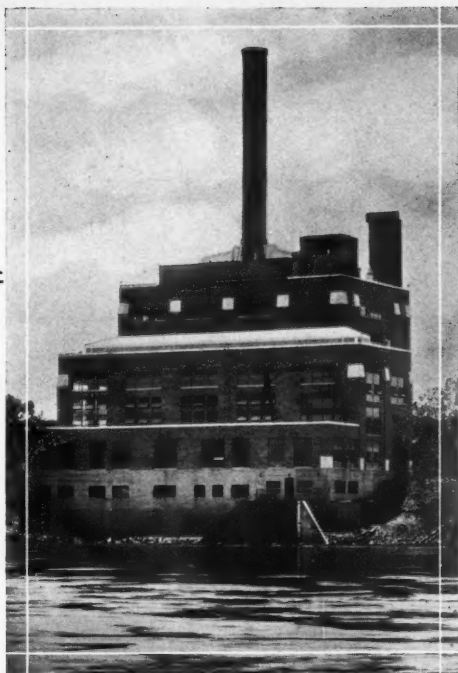
FOREST FARMING

Reforestation—fire prevention, etc.

In the application of electricity to household tasks and comfortable living great progress has been made.

	1929	1938
Average annual consumption residential customers	417 KWH	1326 KWH
Total number communities served	84	133

SOUTH CAROLINA POWER COMPANY



*Lincoln Beerbower
Plant at White Eagle,
Oklahoma, 15,000
KW Capacity*

SERVING 160,000 CUSTOMERS

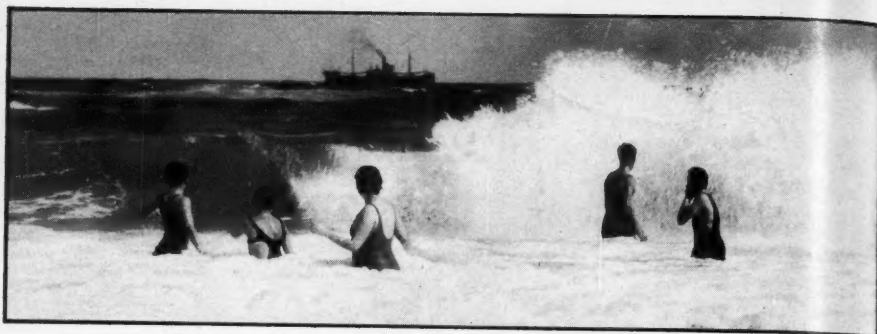
with

- 4 Major Steam Power Plants
132,500 KW Capacity
- 2,539 Miles of Transmission Lines
- 4,527 Miles of Distribution Lines
- 1,860 Miles of Rural Lines
-

243 Oklahoma and Arkansas communities, embracing a population of 683,287, are served by O G & E Co. lines.

OKLAHOMA GAS AND ELECTRIC COMPANY

*An Oklahoma Institution • Established, Oklahoma Territory, 1902
J. F. OWENS, President*



WINTER VACATIONLAND SUMMER



IN FLORIDA . . . WHERE ALL SEASONS REACH PERFECTION!

June or January . . . August or March . . . Florida's balmy climate assures uniform pleasure and contentment. Health comes not only from the skies and sea but from the vitamin-crammed fruits and vegetables growing in profusion in Florida's agricultural empire. And, best of all, a constantly increasing number of people enjoy the comforts of dependable electric service . . . cheap in price . . . priceless in advantages.

●
SUNSHINE
SERVICE

FLORIDA POWER & LIGHT COMPANY

JUNE 8, 1939

Progressive Arkansas

WITH a penchant for using experience merely as a guide and constantly striving to develop new and better ways and methods, Harvey Couch, president, and associates of the Arkansas Power and Light Company have made two great contributions to the industry and the nation as a whole during recent years: (1) the new type rural line, which made rural electrification possible in three-four-customers-to-the-mile territory; (2) coöperation of the Federal government in construction of a dual-purpose (power and flood control) dam by which the government obtains reservoir space at a fraction of the usual cost.

I. The new type rural line, developed by Arkansas Power and Light company engineers, in coöperation with manufacturers, after Mr. Couch had emphasized that a lower cost line had to be devised, costs only 50 to 60 per cent as much as the former standard line. It is now in use throughout the country, taking electricity to thousands who otherwise could not have obtained service. Incidentally another innovation in the Arkansas Power and Light Company's rural electrification program was the employment of prospective customers in construction, enabling the customer to earn enough to pay for wiring, purchasing some equipment and making the usual customer's deposit. Thousands of Arkansas Power and Light farm customers availed themselves of this opportunity. While many farm owners are comfortably off, not many have so much ready cash that they would not prefer to trade labor instead of money. The benefits of the policy are shown in the larger number of customers per mile in comparable territory as compared with the number where farmers must pay cash for wiring their premises.

Since inauguration of the rural electrification program in 1935, The Arkansas Power and Light Company has constructed more than 1,600 miles of the new type line, extending service to more than 6,000 farms and other rural establishments. By building from the existing system, the company has been able to reach more people for the amount in-

vested than if independent lines had been constructed.

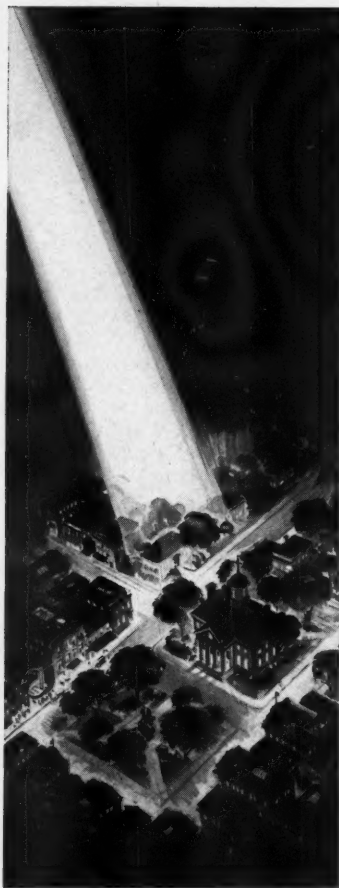
The REA has coöperated with the AP&L, taking low interest bonds of the company because it was necessary for the company to have the advantage of low cost money to serve the territory.

II. The dual-purpose dam is to be constructed on the Ouachita River, where the Arkansas Power and Light has two hydro-electric developments. The cost is estimated at \$6,000,000, with the government making a contribution of \$2,000,000 for reservoir space of more than 500,000 acre feet. This gives the government storage for flood control for less than \$4 per acre. The development will be constructed and operated under the direction of the U. S. Army engineers and the Federal Power Commission.

THESE are only two of the many "firsts" Harvey Couch and his crowd have to their credit. Back in the days when he was in the telephone business, he and his workers were the first to use mules to unreel wires; first to use a forked stick (since refined into an implement) to raise the wires to the cross arms, first to devise the method followed today for transposing the wires.

While serving as fuel administrator of Arkansas during the World War, Mr. Couch was told there was no market for slack. "If I find a market, will you divide with the government?" The operators agreed. Mr. Couch found a market, but when the mine owners paid off, the Arkansas Power executive learned that the government couldn't accept the \$25,000 or more accruing as result of his salesmanship. Finally, the money was given to the state council of defense, and some other organizations.

Numerous other instances of the breaking away from ruts of experience by the Couch company could be cited, but the two—new rural line and government coöperation in the power-flood control dam—are probably the most outstanding and generally beneficial—industry and taxpayers alike—of recent years.



OUR 168,000 residential customers, scattered over an area of 44,000 square miles, have their homes in 601 separate municipalities—440 of which have less than 1,000 inhabitants. That broad fact, in itself, gives this Company quite a rural aspect. In addition, however, we also serve 22 REA cooperative lines with power at wholesale rates—as well as other thousands of farms on our own rural lines and many hamlets and communities not catalogued as incorporated municipalities. And these homes on our lines USE their electric service. In 1938, for example, the

***Sometimes They Call Us
The Rural Georgia Power Company***

average consumption per home on all our lines was 1,392 kilowatt hours, more than 60 per cent greater than the national average of 853 kilowatt hours per home.

GEORGIA POWER COMPANY

Greetings and Best Wishes!

*Delegates and Guests attending the E. E. I.
Convention and the New York World's Fair*

ARE INVITED TO

AROOSTOOK

in

NORTHERN MAINE



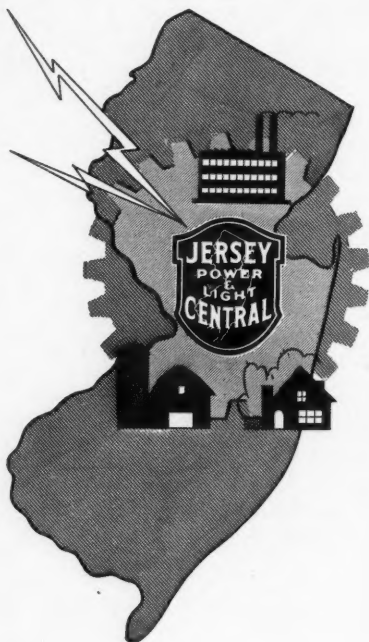
Aroostook County, Maine
6,453 Square Miles
of
Sportsmen's Paradise

*Lakes
Streams
Mountains
Trout Brooks*

Woods — Big Woods — Wild Woods

MAINE PUBLIC SERVICE COMPANY
PRESQUE ISLE, MAINE

WRITE US FOR INFORMATION



JERSEY CENTRAL POWER & LIGHT CO.

SERVING 277 COMMUNITIES IN NEW JERSEY

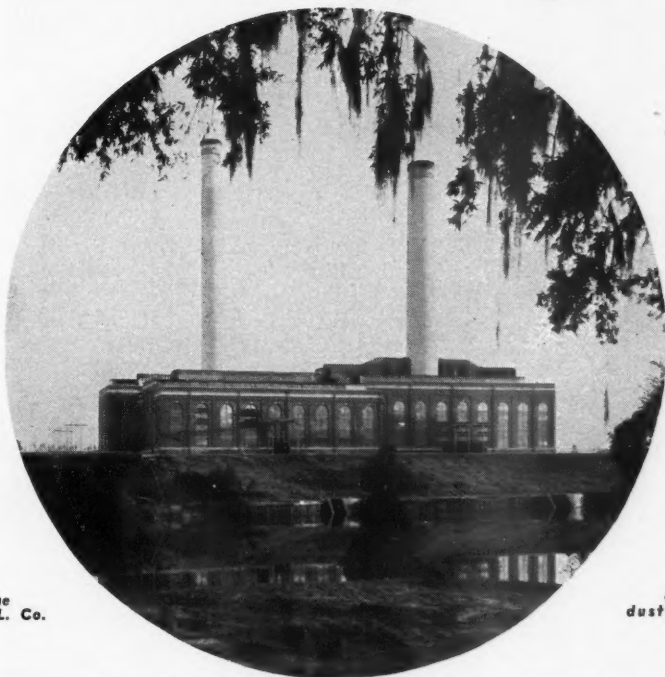
THROUGH conservative management, coupled with the aggressive promotion of merchandise sales, the Jersey Central Power & Light Co. has forged steadily ahead over the past seven years to record the best earnings in its history in 1938.

During the same period, despite the increasing burden of taxes, wage and salary increases, and the consistent expansion of pension, insurance, and other welfare benefits to employees, the company was able to reduce rates by \$1,223,628. At the same time the company has put more than \$3,000,000 out of earnings back into improvements in property and in improving its cash position.

Serving 155,000 customers in 277 New Jersey communities, the company crossed the million dollar mark in merchandise sales in 1936, reached a million and a quarter dollars in 1937, maintained approximately the same volume in 1938 and, at the present time, is running well ahead of last year.

This volume of sales, reflected in load, has increased the average yearly residential electric consumption per customer 22 per cent since 1935.

LOUISIANA IS *Electrifying*



100,000 KW
Sterling Plant
Station of the
Louisiana P. & L. Co.

Serves 214
Communities
and 371 In-
dustrial customers

PROGRESS is on the march in Louisiana and the Louisiana Power & Light Company is in step. As early as 1928, we realized the possibilities in this State and increased the capacity of our generating plant to 100,000 kw. This plant is located at Sterlington on the Ouachita River right in the heart of Louisiana's famed Natural Gas fields. When this enlarged plant was put into operation 11 years ago, we served 13,124 Residential and Farm customers in 82 communities. During each succeeding year, we have extended our lines into more and more rural areas until today, we serve 35,725 Residential and Farm customers in 214 communities. 165 of these communities received their first electric service from us. Ours is a rural company. Only 16 towns on our lines have more than 2500 population. The largest has a population of 19,537. We have an average of 15.07 customers per mile on 2370 miles of distribution lines which extend into 42 of Louisiana's 64 Parishes (counties).

In addition to its interest in the state's rural development, the Louisiana Power & Light Com-

pany is vitally concerned with Louisiana's industrial development. Power from the Sterlington Plant is served directly to 371 Industrial customers. Hundreds of others receive all or part of their power requirements indirectly from us through our eleven Public Utility interconnections.

THE abundant supply of cheap, dependable electric power coupled with the unusually liberal 10-year tax exemption plan of Louisiana's progressive State Administration is bringing many industries to the State. Here industries find an unlimited supply of such natural basic resources as oil, gas, sulphur, salt, timber, and limestone. Louisiana is unique in its transportation facilities which comprise water, rail, paved highways, and intra-coastal canals. All of these advantages plus a climate which is ideal for industrial locations and expansion has started a movement of industry to Louisiana that in the not distant future will bring untold wealth to the State. Turning the wheels of many of these new industrial plants will be the cheap, dependable power of the Louisiana Power & Light Company.

LAKE SUPERIOR DISTRICT POWER COMPANY ASHLAND, WISCONSIN

June 1, 1939

To Delegates and Guests
Edison Electric Institute
Convention, New York, N. Y.

We are happy to have this opportunity to send you greetings and our best wishes for a most successful meeting.

The electric utility industry's contributions to the "Forward March of America," as exemplified by the industry's exhibits at the New York World's Fair, are outstanding achievements in the world of today.

And the industry's continued co-operative effort, as exemplified by this seventh annual convention of the Edison Electric Institute, assures still greater electrical progress in "The World of Tomorrow."

LAKE SUPERIOR DISTRICT POWER COMPANY



Sp

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JAN.
FEB.
MAR.
APR.
MAY

Something to See and Do in New Orleans all the time

• MARDI GRAS

The new world's old-world festival—a season for free-souled gaiety, masquerading and pagentry occasioned by the approach of the Lenten period.



• \$10,000
CRESCENT CITY OPEN

SPRING

• SPRING FIESTA

When Spring comes to the glorious southland, New Orleans hospitably throws open its historic and charming old homes and beautiful gardens for the pleasure of pilgrims from everywhere.



• HORSE RACING

Representative racing stables of the nation come to New Orleans to participate in the 126-day racing season at the Louisiana Jockey Club, opening on Thanksgiving Day.

• HUNTING

Within the official seasons, New Orleans and its environs is a haven for those who would hunt water fowl and small game, with much of the hunting being done within the city limits.

• SUGAR BOWL

A comparative newcomer in the field of sports, but established as one of the nation's two outstanding football classics is the annual Sugar Bowl football game between two of the country's finest teams. But the Sugar Bowl game is only one of the events of the Mid-Winter Sports Carnival, which runs the gamut of sports and annually builds an honor roll of American athletes.

We extend our greetings to the delegates of the Edison Electric Institute and pledge to the nation our continued support to the upbuilding and expansion of the Electrical Industry.

AUTUMN



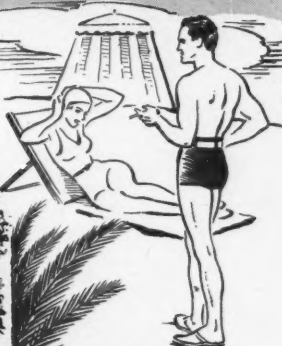
WINTER



SUMMER

- BATHING
- FISHING
- SAILING

Beautiful Lake Pontchartrain and the Gulf of Mexico offer the finest facilities for water sports. Bathe in the surf of Grand Isle, battle game fish in the Gulf at the mouth of the Great Mississippi, or sail in a spanting breeze with the historic Southern Yacht Club in the distance.



• FLORAL TRAIL

Come to New Orleans in February or March to see 55 miles of neutral ground lined with azaleas and camellias, with the complete route free and marked with signs for the convenience of visitors.



NEW ORLEANS PUBLIC SERVICE INC.



THE STORY BEHIND THE SWITCH...

Utility service becomes real for a customer when he flicks a switch and gets light . . . or heat . . . or power. This simple operation gives no hint, however, of the investment and organization which are necessary to make that service possible.

These are some of the facts behind the service supplied by companies in the Associated System—

CUSTOMERS. Electric, gas, and other services supplied to 1,754,000 customers. Greatest concentration in New York, Pennsylvania, New Jersey.

RATES. Customers saved \$17,500,000 annually by total rate reductions made over past 10 years. In this period, domestic electric rate reduced 46%, compared with 36% for the entire industry.

TAXES. Taxes of approximately \$50,000 a day, or a total of \$17,226,000 in 1938. This compared with \$6,830,000 in 1929.

EMPLOYEES. Service required 19,298 regular, 1,970 temporary employees in 1938. Pay roll \$33,000,000.

INVESTORS. Holders of Associated Gas and Electric Company securities number 155,

318, reside in every State and in many foreign countries.

CONSTRUCTION. In order to maintain and extend service, approximately \$200,000,000 spent for new construction over the past 10 years. More than \$14,000,000 spent in 1938.

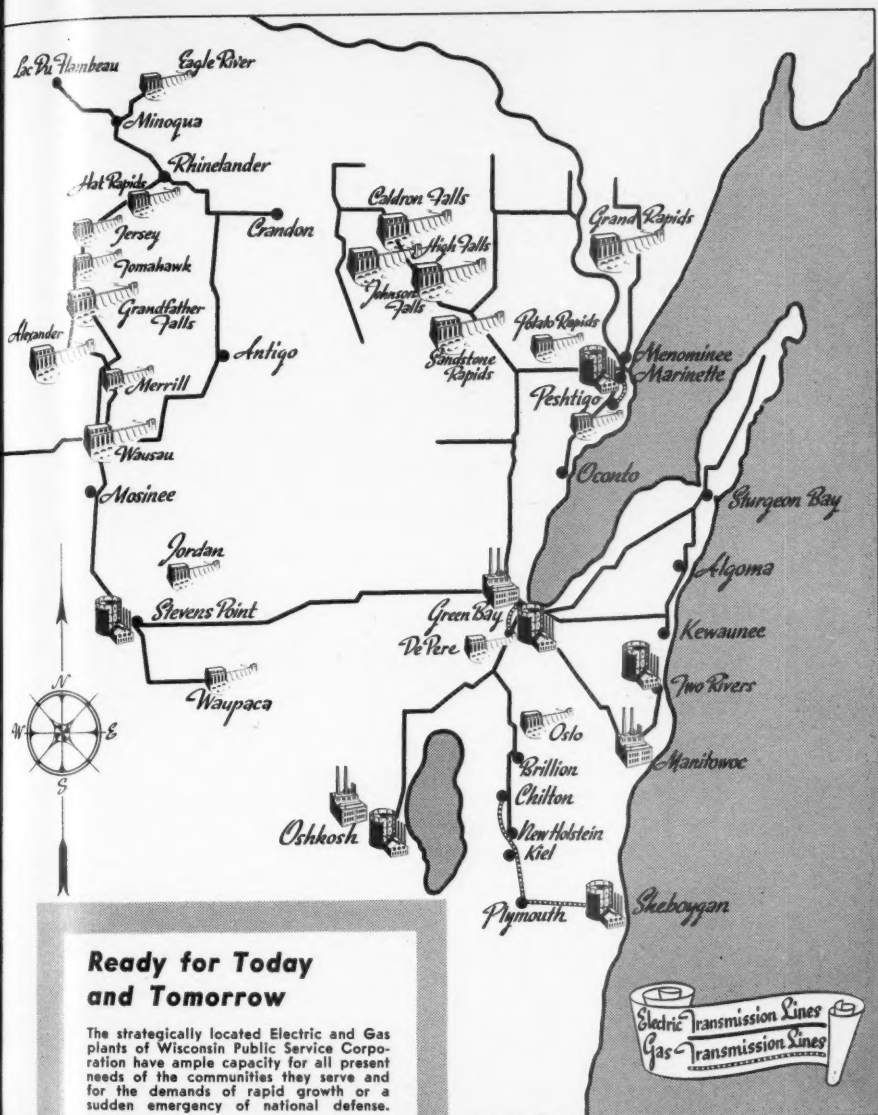
RURAL SERVICE. More than 230,000 farmers and other rural customers receive electric service. This service required an investment of more than \$43,000,000 by the System.

★

There is still a great development ahead for the public utilities. But it is a development which requires the industry to spend large funds. The funds will not be supplied by investors unless they feel assured that utilities will be allowed to earn a fair profit, and that they will not be injured by subsidized competition.



ASSOCIATED GAS AND ELECTRIC COMPANY



Ready for Today and Tomorrow

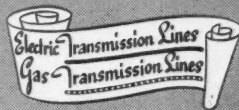
The strategically located Electric and Gas plants of Wisconsin Public Service Corporation have ample capacity for all present needs of the communities they serve and for the demands of rapid growth or a sudden emergency of national defense.

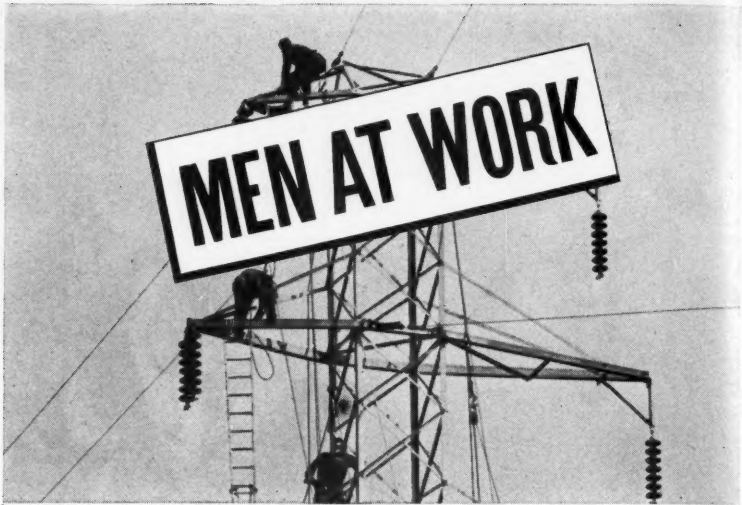
Responding quickly to the 1917 call to the colors when sudden power was the need, Wisconsin Public Service is ready today with a completely inter-connected and thoroughly modern hydro and steam generating system. The map above shows an area of 11,000 square miles and 221 communities, with customers totaling 13,000 industrial and commercial establishments, 75,000 homes and 13,600 farms.

W I S C O N S I N

Public Service

C O R P O R A T I O N





Travel about New York State and you pass hundreds of miles of electric power lines. They run between every town, city and village on the Niagara Hudson System, making available everywhere, low-cost and abundant electric power.

Along these lines and at their sources and terminals thousands of our employees are at work keeping this power at the command of our customers.

Yet these "men at work" are but a part of the number whose jobs in no small degree have been made possible by the progress of the electric industry. New industries and products, and refinements of the old, have brought revolutionary changes in our lives, with added comfort, leisure, and other advantages to our communities, our state, and our nation.

The New York World's Fair of 1939 demonstrates many contributions of the electric industry to the world of today and gives a preview of the continued advantages to be realized in the "World of Tomorrow".

NIAGARA  HUDSON

MISSISSIPPI POWER & LIGHT CO. FIRST BROUGHT ELECTRIC SERVICE TO

183 Mississippi Communities

THE *Mississippi Power & Light Company*
serves an area of more than 15,000 square
miles with about four customers to the
square mile.

MANY UTILITIES serve more customers in one to three hundred square miles than the Mississippi Power & Light does in an area of 15,000 square miles with 56,000 customers of all types . . . about 40,000 residential; 10,000 commercial; 1,500 industrial; and 5,000 farm.

With fewer customers and far less revenue than a concentrated metropolitan company, the company has of necessity built hundreds of miles of transmission lines and employed hundreds of people to serve sparsely settled communities of the State.

Yet, in spite of the consequent relatively high unit operating cost per customer, the company has systematically adjusted its rates downward to where they are competitive with those enjoyed by any neighboring people, and with electric service of substantially equal efficiency to that of metropolitan service.

Of course, the extension of transmission lines, need for numerous substations, and the increase of capital investment required for an advancing program has also made the company a leading taxpayer in the territory

served. Approximately \$1,000,000 is paid annually to the several tax gathering agencies.

This amount is of considerable proportions in Mississippi: if it were to be used for such purposes it could pay the total annual cost of maintaining the State's paved highways, or pay nearly all of the present old-age benefits, or it would be sufficient to pay for 50-miles of modern concrete highway. It exceeds the entire amount of county ad valorem and poll taxes collected for public schools in 23 north-west Mississippi counties.

The Mississippi Power & Light Company is regarded by Mississippians as one of the State's basic industries. It spends \$1,500,000 annually through the State's business channels for the purchase of materials and supplies.

More than 1,000 Mississippians are regularly and gainfully employed, and they receive in aggregate yearly salaries over \$1,400,000 which they spend and invest in the more than 300 Mississippi communities served by the company.

Mississippi Power & Light Co.



Helping Build Mississippi

The Service of Today Builds The Progress of Tomorrow

Thus the service of the Utility Company in the communities it covers, not only in producing and distributing a fundamental commodity, but in furthering the industrial, agricultural and recreational interests in these communities, becomes a vital factor in present and future progress.

NEW ENGLAND GAS & ELECTRIC ASSOCIATION
CAMBRIDGE, MASS.

LIGHT—

TREASURE ISLAND'S GREATEST TREASURE

When you come away from San Francisco's Treasure Island you will carry recollection of supreme beauty in art, architecture, blue lagoons, myriad fountains, flowers in a riot of colors. And you will agree that Treasure Island has been happily named.

But your most vivid recollection of all will be of its greatest treasure—a lighting display on towers, in courts, on lagoons, that in breath-taking beauty far surpasses any dream of fairyland.

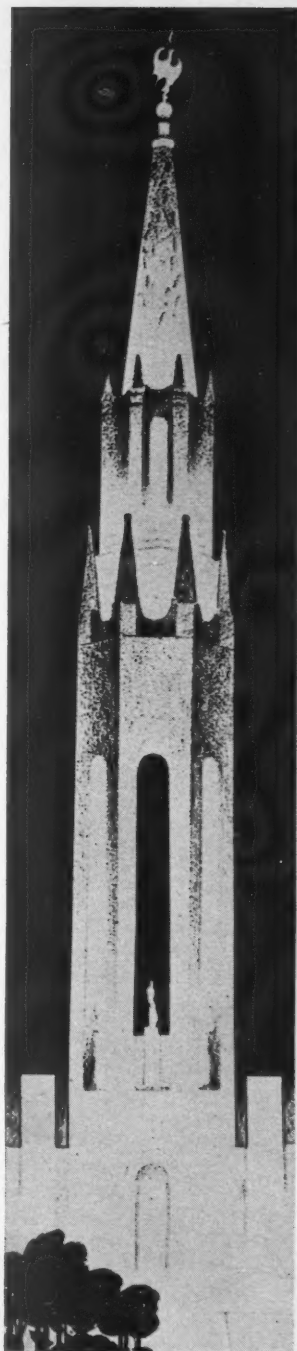
Here is the electrical industry's finest contribution to the Exposition. It is not the only one, however. Pacific Gas and Electric Company's enormous animated diorama is one of the chief exhibits in the Electricity and Communications Building. We are participating with the Gas Industry in another extensive exhibit in the Homes and Gardens Building.

***Come to Treasure Island —
Treasures everywhere and the
greatest of these is Light.***

P. G. and E.

PACIFIC GAS AND ELECTRIC COMPANY

San Francisco, California





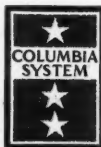
NEW FRONTIERS IN THE WORLD OF ELECTRIC POWER



NO LONGER are the economic advantages of electric power confined to the large metropolitan cities. Gradually this potent energizing force has reached the towns, and extends to the most remote villages and hamlets of the nation—to lighten labor, brighten homes, save time and otherwise contribute to the comfort and convenience of all our people.

Today, widely available electric power permits the industry to do much of its work in the smaller centers of population, away from the congestion of great municipalities. As a result, tenement dwelling workers may abide more cheaply and pleasantly on the countryside, well housed among healthful, satisfying surroundings. . . .

Agricultural sections also have benefited materially through the recent advances in electrical production, distribution and technical achievement. In fact, it has been estimated that there are approximately one hundred and forty present uses for electric power on the farm and even more for rural industries—a definite contribution toward greater versatility in such pursuits.



Columbia System operating units have shown a consistent gain in electric customers, the present total exceeding 350,000. These companies keep pace as well with the nation's growing use of Natural Gas, for the past year having met the needs of more than 1,000,000 commercial, industrial and home consumers.

COLUMBIA GAS & ELECTRIC CORPORATION

The Latest Utility Rulings

Electric Company Permitted to Continue Service in Competition with City Plant



As an aftermath of the decision by the Illinois Supreme Court in *Geneseo v. Illinois Northern Utilities Co.* (1936) 363 Ill. 89, 14 P.U.R. (N.S.) 61, the city filed a complaint with the commission seeking to oust the company from city streets and public places. The court had ruled that exclusive jurisdiction over all means and instrumentalities used by the utility in the conduct of its business had been vested in the commission. Accordingly it had refused the city's plea for a judicial decree ousting the company after expiration of its franchise ordinance.

The commission dismissed the complaint of the city, refusing to accept the city's contention that it is unlawful for a public utility to continue to occupy city streets after expiration of ordinance rights. The city had taken the position that even though the court had decided against it in its ouster suit, the effect of the court's determination was to shift the city's case from the court to the commission. It contended that continued occupancy after franchise expiration was illegal and that the court had decided only that the commission rather than the court was the proper agency to pass upon the controversy. The commission,

in its opinion, made this statement:

We conceive the effect of the supreme court decision in the *Geneseo* Case to be that the question of whether or not a public utility should discontinue service in a municipality after the expiration of its ordinance is a matter to be determined by this commission and that such determination should be made in accordance with the just and reasonable requirements of public convenience and necessity; that is, whether or not the respondent public utility now serves a useful purpose in the city of Geneseo as contemplated by the Public Utilities Act. This commission is not clothed with arbitrary power and all its determinations must be just and reasonable. It may not arbitrarily say to the respondent company that it must remove its poles and wires from the streets and public places of the city of Geneseo and cease to do business therein; and any order issued by this commission should follow the spirit of the statute which requires that any action taken by it be just and reasonable. The evidence shows that a substantial portion of the population of Geneseo is served by the respondent company, and we are, therefore, of the opinion that a just and reasonable determination of the questions presented to us requires that the respondent company be permitted to continue to serve its customers in the city of Geneseo.

City of Geneseo v. Illinois Northern Utilities Co. (26345).



Necessity of Commission Approval of Rights Granted by Renewal Franchise

THE Missouri commission announced its policy as to the granting of new certificates and the approval of renewal franchises when a certificated electric company, upon expiration of its franchise, obtains a new one. The company had applied for an order either (1) cer-

tifying anew the necessity and convenience of utility operations and permitting and approving such operations as an exercise of recently renewed franchises, or, in the alternative, (2) declaring that previously issued orders certifying the convenience and necessity of such operations

PUBLIC UTILITIES FORTNIGHTLY

were still effective and constituted permission and approval of the exercise of the local franchise rights and privileges renewed.

On the first question the commission was of the opinion that, since after due hearing and upon satisfactory proof it had issued certificates of convenience and necessity authorizing service in the municipality under franchises theretofore granted, it should be ruled as an administrative policy that the company was not required to obtain new certificates to render service in the municipality. This ruling, however, was not to be construed as any holding or ruling on the part of the commission that a certificate once issued conferred upon a utility the right to operate without a municipal franchise.

On the second question the commission took the view that as an adminis-

trative policy the applicant should be required to submit to the commission copies of the new franchises for examination and approval and to obtain from the commission permission and approval to exercise the rights and privileges and to assume the obligations arising under such new franchises. The commission was of the opinion that the legislature intended and required that any franchises granted to such a utility should be submitted to the commission for approval.

A franchise, it was said, like any other long-term contract entered into by a public utility under commission jurisdiction, is a matter which the commission may properly inquire into with a view to determining whether its performance by the utility will be in the public interest. *Re Union Electric Co. of Missouri (Case No. 9624).*



Investigation of Gas Cost under Natural Gas Act

THE Federal Power Commission, in its first formal opinion rendered under the Natural Gas Act, denied the petition of the East Ohio Gas Company for a hearing, rehearing, and stay of the commission's order instituting on its own motion an investigation into the costs of transportation of natural gas by the company from the Ohio river to the Cleveland city gate, and requiring the company to state the original cost of its property used in such transportation.

The commission ruled that no hearing was necessary prior to the adoption of such an order. It answered a contention that findings made and facts assumed by the order were not based upon any evidence disclosed to the company or appearing in the record by stating that from the response to a questionnaire filed by the company, which included a map and a description of operations, the commission acquired considerable familiarity with the company's operations. The commission said that it did not assume any facts which were not already known to

the company and supplied to the commission by that company. The only findings made by the commission in its order were said to be in respect to the desirability of an investigation in the public interest, and in connection therewith the necessity of an inventory and statement of the original cost of the property.

A contention that the company was not a natural gas company within the meaning of the Natural Gas Act, as its public utility activities were confined to local distribution of natural gas and transportation thereof wholly within the state of Ohio, was overruled. The commission said that the circumstances that the company transmitted gas for its own account, owned and purchased by it from a single vendor under private contract, did not exempt the company from the Natural Gas Act. It was pointed out that the act is not restricted in its application to companies engaged in the transportation of natural gas in interstate commerce as "common carriers" but applies to all "engaged in the transportation of

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natural gas in interstate commerce."

The commission refused to pass upon the question whether the transportation could be declared by Congress to be a public utility service, for it was not within its province to pass upon the constitutionality of statutes enacted by Congress.

The company contended that the investigation was solely to compile information having no possible relevancy to any governmental object, except regu-

lation of the company's rates for local distribution in the city of Cleveland, and was therefore contrary to the Constitution of the United States. The commission, after stating that the constitutional question was not within its province, said that the order to the extent that it aided state and local regulation was in conformity with the intention of Congress. *Re East Ohio Gas Co. (Docket No. G-115, Opinion No. 37).*



Date for Valuing Electric Property to Be Acquired by Municipality

THE supreme court of Wisconsin held that a commission order fixing compensation to be paid by a municipality for utility property is unlawful where the amount is ascertained on the basis of the value of the property at the time of a referendum vote to acquire the plant if the award is not in fact made until three years later, after violent fluctuations in price levels. The court expressed the view that the property should be valued as of the date of the award of compensation by the commission.

In this country, said the court, the authorities are in general accord upon the proposition that the value of the property taken is to be measured as of the time of the taking or appropriation thereof, but upon the question of when the property is taken there is a split of authority. The result in different jurisdictions depends upon the peculiar wording of the constitutional provisions relating

to the power of eminent domain or upon the statute pursuant to which the proceedings are conducted. The court continued:

In some jurisdictions the date of filing the petition is the time of taking, in some jurisdictions the date of filing the bond, in other jurisdictions, the date of entry upon the property, and in other jurisdictions, among which is Wisconsin, the date of the award fixes the time of taking.

Since the utility must continue furnishing service as long as its property remains in its possession, the court said that it considered that adjustment of compensation for retirements from, and additions to, the plant in the meantime was in the nature of an accounting and that the commission might make such accounting under its authority to fix terms and conditions. *Wisconsin Power & Light Co. v. Public Service Commission et al. 284 N. W. 586.*



Restriction on Telephone Use at Gas Service Station

COMPLAINTS by operators of gas service stations against the enforcement of a rule restricting customer telephone service, as distinguished from public and semipublic telephone service, were dismissed without prejudice by the Missouri commission after an amicable settlement of the controversy appeared to have been

reached. The commission, however, expressed its views on such a rule or regulation.

The rule provided that customer telephone service should be furnished only for use by the customer, his family, his guests, employees, or business associates, or persons residing in the customer's

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household, except as the use of the service might be extended to joint users. The company reserved the right to refuse to install such service or to permit such service to remain on premises of a public or semipublic character when the instrument was so located that the public in general might make use of the service.

The commission recognized the fact that many customers were receiving straight-line business telephone service throughout the state in offices, stores, and other places, where an occasional use of the telephone was permitted and desirable by persons who were not entitled to the use of it under the strict interpretation of this rule. But, said the commission:

On the other hand, the rule or a similar rule, should be published and used as a guide to the users of the service and to the utility furnishing it to prevent the abuse of the service by the users or by persons who may casually or regularly call at a place of business and desire the use of the telephone.

There is more inclination on the part of non-subscribers of the service to avail themselves of the use of the telephone service in some types of business places than in others. This is particularly true in the type of customers represented in this complaint, such as filling stations. Filling stations are generally scattered at convenient places throughout the city area. If use of the telephone service is permitted with the telephone instrument located at a place where it merely requires that the user stop in and operate the instrument without restraint, abuse in the use of the service will too often be the result. Many resident customers in the neighborhood or passers-by may make it their regular mode of securing telephone service. It is not reasonable to expect that such unreasonable use of the service should be granted.

The commission expressed the opinion that the rule itself should be looked upon as an administrative rule and should not be abused by the public or arbitrarily enforced by the utility to 100 per cent. *Budd et al. v. Southwestern Bell Telephone Co. (Case No. 9541).*



Punctuation Disregarded to Give Effect to Statute Authorizing Assessment of Expenses

A SECTION of the Pennsylvania Public Utility Law, before its amendment in 1938, authorized the commission to assess expenses of commission employees against an investigated utility whenever the commission "in a proceeding upon its own motion on complaint, or upon an application to it, or in connection with a securities certificate" shall deem it necessary to investigate.

A public utility company objected that under this authorization the commission could not assess expenses attributable to an investigation instituted by the commission upon its own motion unless a complaint had been filed. The commission, however, ruled that this was not the intention of the legislature and that the utility must pay the assessment.

The Public Utility Law provides for commencement of action in four different ways: (1) by the commission upon its own motion, (2) by the filing of a complaint by any interested party, (3) by

the filing of an application, and (4) by the filing of a securities certificate. The commission pointed out that unless an action could be commenced by the commission upon its own motion, its functions would be curtailed to a great extent. It was said to be highly improbable that the legislature empowered the commission to commence actions upon its own motion in other sections of the act, but limited the assessment of specific expenses to those cases where the action was commenced by the commission upon its own motion only when a complaint had been made, or by any one of the other three ways mentioned.

This interpretation was said to be strengthened by the amendment in 1938 which authorizes the commission in the performance of its duties under the act to conduct an investigation of the affairs of any public utility and which requires the utility to pay the expense.

The commission said that the earlier

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statute was not properly punctuated, and in order to ascertain the intention of the legislature it should be read as though there were a comma after the words "proceeding" and "motion." The punctu-

ation contained in the Acts of Assembly, according to rulings and statutes cited by the commission, is not official and cannot control the interpretation. *Re Overbrook Steam Heat Co.*



Gas Contracts Subject to Commission Approval

A PUBLIC utility gas company was accepting natural gas pending the commission's approval of a contract substituting natural gas for artificial gas, after the commission had entered an interlocutory order providing a temporary rate schedule. The question arose as to whether such acceptance constituted a waiver of a condition in the supply contract requiring the approval of the commission.

A Federal circuit court of appeals held that acceptance, under these circumstances, did not constitute a waiver of the condition. The court stated:

At this time, however, it is certain that both plaintiff and defendant had knowledge that the commission had only authorized the use of natural gas by the defendant as a temporary expediency and that the same could be charged for at a rate which was likewise temporary. The plaintiff, as well as the defendant, must have known that the latter would have no use for natural gas except as it was permitted to distribute it to

its customers by authority of the commission and that both had actual knowledge that the authority granted was of temporary character and more than that, that its use was regarded by the commission as of an experimental nature. With that knowledge, we do not see how it can be contended that any reasonable person would have been led to believe, or considered for a minute, that the commencement of the delivery of natural gas under such circumstances could be otherwise than of a temporary nature.

It was further held that the company, by accepting natural gas under such conditions, was not estopped to deny that it had waived the condition requiring approval of the commission, in the absence of misrepresentation or fraud, notwithstanding that during the period natural gas was received, transactions between parties were carried on largely in conformity with the terms of the proposed contract. *Universal Gas Co. v. Central Illinois Public Service Co.* 102 F. (2d) 164.



Municipal Consent to Bus Operation Not Binding on Commission

THE New Jersey Board of Public Utility Commissioners granted a rehearing on an application for authority to operate busses at the behest of a municipality, although the commission found no legal basis for granting the rehearing. The reasons advanced by the municipality for not participating in the proceeding in which the authority was granted were (1) that the town did not wish to spend the money, (2) that the consent anticipated that the municipality would get local service.

The board ruled that neither of these objections constituted compelling rea-

sons for a rehearing. It stated its views in regard to local consents as follows:

As to the municipality in giving its consent "anticipating that local service will necessarily result," that position too is untenable. Municipalities must realize that while the granting of consents rests solely with the municipalities, regulation of public utilities resides solely with this commission. That is the statutory duty imposed on the board. This board will in all instances give weight to the desire of municipal officials whenever under the circumstances of the case the facts warrant and the law permits. That is the predominant reason why municipalities are afforded notice of hearing. However, municipal desire, understanding, an-

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ticipation, or any other motive does not minimize the responsibility which is solely that of the commission. This, to the end that transportation facilities may be required to render safe, adequate, and proper service, not only for the particular municipality but for the community as a whole. The commission may withhold its approval of municipal consent, grant its approval unqualifiedly, or grant it with reservations commonly called restrictions. All this as incident to the para-

mount question whether public convenience and necessity require the board's approval of the municipal consent and whether the public interest will be served thereby. Public convenience and necessity do not mean a door-to-door bus service. That may be convenient, even desirable, but from the standpoint of rational regulation, utterly impossible.

Re Town of Belleville.



Other Important Rulings

THE supreme court of Indiana has held that the facts do not warrant an order restraining a telephone company from discontinuing services over a certain line until final hearing before the commission, where there was no question of discontinuance of service involved but merely a question of the route over which messages shall be transmitted, and where the injured party had an adequate remedy at law for injuries sustained, by loss of toll calls, through an accounting. *Northern Indiana Telephone Co. v. United Telephone Companies, Inc.* 19 N. E. (2d) 940.

A Federal circuit court of appeals held that the Wisconsin commission's jurisdiction is restricted to the matters of service, rates, and schedules of a street railway company and does not include the repair of track zones or removal of rails, such matters being subjects of municipal regulation, enforceable by appropriate judicial remedies. *Re Madison Railways Co.* 102 F. (2d) 178.

The department of public service of Washington held that a carrier engaged in the business of transferring motor vehicles under their own power and by towing comes within the purview of a statute the purpose of which is to regulate transportation where such transportation is performed by motor vehicles for compensation, since it makes no differ-

ence whether the vehicles are towed by other vehicles or whether they operate on their own power. *Re Dependable Delivery & Storage Co., Inc.* (Order M. V. No. 30847, Hearing No. 1735).

The Texas Court of Civil Appeals held that an order of the commission granting leave to a common carrier of passengers by motor vehicle for its busses to enter and leave the terminal of another such carrier and fixing the compensation therefor constitutes a taking of property within the due process clauses of the state and Federal Constitutions and, therefore, requires notice and hearing. *Highway Transportation Co. et al. v. Southwestern Greyhound Lines, Inc.* 124 S. W. (2d) 433.

The Pennsylvania Superior Court held that a partnership soliciting contracts for the carriage of freight for compensation in trucks leased from owner-operators, and who are ready to make such contracts with anyone who will ship in truckloads, are common carriers and not contract carriers. The court held that the presence or absence of contracts is not controlling in a determination of whether one is operating motor vehicles as a common carrier, but that the status is a question of fact to be determined from the evidence presented. *Gornish et al. v. Pennsylvania Public Utility Commission*, 4 A. (2d) 569.

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

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RECOMMENDATIONS OF COURTS AND COMMISSIONS



VOLUME 28 P.U.R.(N.S.)

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DRISCOLL v. EDISON LIGHT & POWER CO.

UNITED STATES SUPREME COURT

Denis J. Driscoll et al.

v.

Edison Light & Power Company

[No. 509.]

(— U. S. —, 83 L. ed. —, 59 S. Ct. 715.)

Courts, § 15 — *Jurisdiction of Federal court — Rate case — State Commission order.*

1. A Federal district court has jurisdiction of a bill in equity to enjoin an order of a state Commission reducing rates, and alleged to be confiscatory, when a state law forbids an injunction against an order "except in a proceeding questioning the jurisdiction of the Commission" and, when, without an authoritative determination by the state courts, the Federal court cannot say that the remedy in the state courts is plain, speedy, and efficient, p. 68.

Return, § 6 — *Statutory basis — Elements considered.*

2. A determination of a rate base by giving weight to reproduction cost, original cost, going concern value, and the necessity for working capital and the allowance on such rate base of a return of more than 6 per cent satisfies a statutory requirement that rates shall produce not less than 5 per cent on the original cost less accrued depreciation, p. 69.

Rates, § 630 — *Temporary rate statute — Applicability.*

3. Section 310 (a) of the Pennsylvania Public Utility Law, providing for the fixing of temporary rates on the basis of original cost less depreciation and authorizing the Commission to estimate such cost, is applicable not only to public utilities whose reports to the Commission show the original cost of their physical property but also to those whose original cost is not so shown, notwithstanding the provision of § 310 (b) for fixing rates on a different basis in the case of a public utility which does not have continuing property records, the latter section furnishing a partial alternative to the former section, p. 70.

Return, § 11 — *Basis — Temporary rate statute — Interpretation — Cost basis.*

4. Section 310 (a) of the Pennsylvania Public Utility Law, authorizing the Commission to prescribe temporary rates sufficient to provide a return of not less than 5 per cent on original cost less accrued depreciation, does not prevent an interpretation of the statute as requiring consideration of elements other than original cost in fixing temporary rates; there is no requirement as to how the rates are to be determined except that they shall be sufficient to return a given minimum, p. 70.

Courts, § 21 — *Rules of decision — Federal court — Interpretation of state statute.*

5. The United States Supreme Court is reluctant to accept a construction

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of a state statute which would require a decision on the issue of its constitutionality, in the absence of an authoritative state decision, particularly when the case may reasonably be determined upon the interpretation of the officials of the state charged with the administration of the act, p. 70.

Valuation, § 114 — Cost of financing — Lack of evidence.

6. Exclusion of cost of financing in finding a rate base is not error when there is no evidence of any actual expenditures for such purpose or of any studies of such cost, p. 72.

Valuation, § 114 — Cost of financing — Costs of parent company as evidence.

7. Evidence of financing costs of a parent company in connection with bond issues used partly for construction work of a subsidiary public utility does not support a claim for costs of financing of the subsidiary in the absence of a showing as to the cost of the money to the utility, p. 72.

Valuation, § 330 — Going concern value — Separate allowance.

8. A Commission, making no specific allowance for going concern value, gives practical effect to this consideration when it fixes fair value considerably in excess of its average of original and reproduction cost, both depreciated, p. 73.

Appeal and review, § 52 — Commission decisions — Going value.

9. For a reviewing court to appraise the elements of going concern value (utilization of production, expenditures to secure customers, character of territory served, ability to earn, efficiency of management, adequacy of power supply, and excellent capital structures) apart from and in addition to reasonable cost figures, as a basis for holding erroneous the Commission's denial of a specific allowance for going concern value, would require evidence of a failure on the part of the Commission to give reasonable weight to these factors, p. 73.

Appeal and review, § 52 — Commission decision — Rate base determination — Indirect costs.

10. The amount of indirect costs likely to be incurred in utility plant construction is too uncertain for a reviewing court to conclude that a percentage adopted by the Commission, where evidence was introduced supporting each percentage estimate, is erroneous, p. 73.

Valuation, § 123 — Overhead estimates — Evidence — Inspection of property.

11. The failure of a witness to inspect utility property does not make less valuable his estimate on the proper percentage to be applied for indirect costs, such as interest, supervision, cost of financing, taxes, and legal expense, p. 73.

Return, § 26 — Reasonableness — Factors considered.

12. Each utility presents an individual problem, and the answer as to an adequate return does not lie alone in average yields of seemingly comparable securities or even in deductions drawn from recent sales of issues authorized by the same Commission, p. 74.

Return, § 26 — Adequacy — Yields of stocks and bonds.

13. Yields of preferred and common stocks are to be considered as well as those of the funded debt in determining the adequacy of return allowed a public utility, p. 74.

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Return, § 89 — Electric utility — Confiscation.

14. A 6 per cent return for an electric utility, after all allowable charges, was held not to be confiscatory where the utility operated in a stable community, accustomed to the use of electricity and close to the capital markets, with funds readily available for secure investment, p. 74.

Expenses, § 90 — Rate case expense — Effect of excessive rates.

15. A utility should be allowed its fair and proper expenses for presenting its side of a rate case to the Commission even where the rates in effect are excessive, p. 75.

Expenses, § 92 — Rate case expense — Amortization.

16. Amortization of rate case expenses over a period of ten years was held to be reasonable, p. 75.

(FRANKFURTER, J., concurs in separate opinion.)

[April 17, 1939.]

APEAL from decree of 3-judge District Court granting a permanent injunction against enforcement of temporary rates fixed by order of the Pennsylvania Commission; reversed. For lower court decision see 25 F. Supp. 192, 25 P.U.R. (N.S.) 441.

APPEARANCES: Guy K. Bard, of Lancaster, Pennsylvania, and Edward Knuff, of Harrisburg, Pennsylvania, argued the cause for appellants; Clarence W. Miles, of Baltimore, Maryland, argued the cause for appellee.

Mr. Justice REED delivered the opinion of the court:

This is an appeal from the decree of a 3-judge district court granting a permanent injunction against the enforcement of temporary rates. Judicial Code, § 266, 28 USCA § 380.

The appellants are five named persons, individually and as members of the Pennsylvania Public Utility Commission, and the Utility Consumers League of York, Pennsylvania, intervening defendant below, an unincorporated association of consumers of electric current in the territory served by the appellee. The latter is a public utility corporation organized under

the laws of Pennsylvania, which generates, transmits, distributes, and sells electric energy to approximately 30,000 customers in and about York, Pennsylvania.

An investigation to determine the reasonableness of appellee's rates was instituted on January 27, 1936. During its progress the state legislature recodified the utility law of Pennsylvania. Act of May 28, 1937, P. L. 1053, Purdon's Pa. Stat. Anno. 1938 Supp. title 66, § 1101 et seq. It enacted a temporary rate § 310, which is the source of this controversy.

Acting under § 310, the Commission, after notice and argument, issued a temporary rate order on July 13, 1937 (19 P.U.R. (N.S.) 474) requiring the utility to file rate schedules which would effect a reduction of approximately \$435,000 in annual gross operating revenues. This order was replaced by another on July 27, 1937, which commanded an identical reduc-

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tion. This time the Commission itself prescribed a schedule of rates. The utility filed a bill in equity in a statutory court in the middle district of Pennsylvania. On October 15, 1937, a permanent injunction issued.¹ The Commission did not appeal. On November 30, 1937 (21 P.U.R. (N.S.) 328) another order was issued seeking to establish the same temporary rates and to secure the same reduction in gross revenues as the orders of July 13th and 27th.

On December 14, 1937, the utility filed a bill in the United States district court for the eastern district of Pennsylvania to enjoin this order. A 3-judge court was convened under § 266 of the Judicial Code. By stipulation of the parties the application for an interlocutory injunction brought to hearing on January 17, 1938, was treated as an application for a permanent injunction. On October 14, 1938, a permanent injunction issued.

The court concluded as a matter of law that the utility had no plain, speedy, and adequate remedy in the state courts; that the order is void because the "Commission acted in direct violation of the mandatory provisions of the Public Utility Act which requires rates for [the company] to be fixed under paragraph (b) of § 310"; that the order is unconstitutional because (1) it violates the procedural requirements of due process, (2) it fails to permit the utility to earn a fair return on the fair value of its property

used and useful in the public service, (3) it confiscates the company's property, and (4) it is not supported by substantial evidence.²

[1] *Jurisdiction of the statutory court.*—Except as modified by the Johnson Act,³ jurisdiction exists in a statutory court, called pursuant to § 266 of the Judicial Code, to hear and finally determine bills in equity seeking temporary and permanent injunctions against the order of a state administrative Commission on the ground of irreparable injury.⁴ By this amendatory act, where the order attacked as violative of the Federal Constitution affects the rates of a public utility, does not interfere with interstate commerce and has been made after notice and hearing, the jurisdiction of the district court to enjoin its enforcement is withdrawn, unless no "plain, speedy, and efficient remedy may be had, at law or in equity, in the courts of such state." No challenge to the jurisdiction was made in the statutory court or on appeal. In response to questions from the bench, counsel for the Commission conceded that there was no remedy in the state courts which would satisfy the Johnson Act.

The reason for this concession lies, so far as a remedy in equity is concerned, in the provision of the Pennsylvania statute forbidding an injunction against an order, "except in a proceeding questioning the jurisdiction of the Commission."⁵ The bill in cer-

¹ Edison Light & P. Co. v. Driscoll, 21 F. Supp. 1, 20 P.U.R. (N.S.) 353.

² Edison Light & P. Co. v. Driscoll (1938) 25 F. Supp. 192, 25 P.U.R. (N.S.) 441.

³ Judicial Code, § 24 (1), as amended by Act of May 14, 1934, Chap. 283, 48 Stat. at L. 775, 28 USCA § 41 (1).

⁴ Oklahoma Nat. Gas Co. v. Russell, 261 28 P.U.R. (N.S.)

U. S. 290, 292, 67 L. ed. 659, 661, P.U.R. 1923C, 701, 43 S. Ct. 353; Herkness v. Irion (1928) 278 U. S. 92, 93, 73 L. ed. 198, 199, 49 S. Ct. 40.

⁵ Section 1111, P. L. 1053, Purdon's Pa. Stat. Anno. 1938 Supp. title 66, § 1441: "Exclusive jurisdiction of Dauphin county court to hear injunctions.—No injunction shall issue

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tain allegations attacks the section of the Public Utility Law under which this order issued as violative of the Fourteenth Amendment in that it empowered the Commission to fix non-compensatory and discriminatory temporary rates, in an arbitrary manner. In one sense this questions the jurisdiction of the Commission. If § 310 is invalid, there is no other provision to authorize temporary rates. Jurisdiction is a word of uncertain meaning. As used in § 1111, *supra*, it apparently refers to proceedings by the Commission under the terms of the statute. In this use it would permit an injunction, equitable grounds being shown, where the public utility is not covered by the act. Otherwise, action in excess of the powers of the Commission, such as a confiscatory rate,

might be deemed beyond its jurisdiction. At any rate, without an authoritative determination by the state courts, we cannot say, for this character of proceeding, that the remedy in the state courts is plain, speedy, and efficient.⁶ The remedy at law by appeal is ineffective to protect the utility's position *pendente lite*. The superseas does not postpone the application of the temporary rates.⁷ The statutory court had jurisdiction of the bill.

[2] Statutory basis for the order.

—Section 310⁸ contains several subsections. The Commission fixed the temporary rates under subsection (a). The district court concluded as a matter of law that this action was invalid because they could only be fixed under subsection (b). The two subsections are set out below.⁹ In its opinion,

modifying, suspending, staying, or annulling any order of the Commission, or of a Commissioner, except in a proceeding questioning the jurisdiction of the Commission, and then only after cause shown upon a hearing. The court of common pleas of Dauphin county is hereby clothed with exclusive jurisdiction throughout the commonwealth, of all proceedings for such injunctions, subject to an appeal to the superior court as aforesaid."

⁶ *Mountain States Power Co. v. Montana Pub. Service Commission* (1936) 299 U. S. 167, 170, 81 L. ed. 99, 101, 16 P.U.R.(N.S.) 235, 57 S. Ct. 168; *Oklahoma Corp. Commission v. Cary* (1935) 296 U. S. 452, 80 L. ed. 324, 12 P.U.R.(N.S.) 161, 56 S. Ct. 300.

⁷ Sec. 1103, P. L. 1053, *Purdon's Pa. Stat. Anno.* 1938 Supp. title 66, § 1433.

⁸ P. L. 1053, *Purdon's Pa. Stat. Anno.* 1938 Supp. title 66, § 1150.

⁹ "Temporary rates.—(a) The Commission may, in any proceeding involving the rates of a public utility brought either upon its own motion or upon complaint, after reasonable notice and hearing, if it be of opinion that the public interest so requires, immediately fix, determine, and prescribe temporary rates to be charged by such public utility, pending the final determination of such rate proceeding. Such temporary rates, so fixed, determined, and prescribed, shall be sufficient to provide a return of not less than 5 per cent upon the original cost, less accrued depreciation, of the physical property (when first devoted to public use) of such public

utility, used and useful in the public service, and if the duly verified reports of such public utility to the Commission do not show such original cost, less accrued depreciation, of such property, the Commission may estimate such cost less depreciation and fix, determine, and prescribe rates as hereinbefore provided.

"(b) If any public utility does not have continuing property records, kept in the manner prescribed by the Commission, under the provisions of § 502 of this act, then the Commission, after reasonable notice and hearing, may establish temporary rates which shall be sufficient to provide a return of not less than an amount equal to the operating income for the year ending December 31, 1935, or such other subsequent year as the Commission may deem proper, to be determined on the basis of data appearing in the annual report of such public utility to the Commission for the year 1935, or such other subsequent year as the Commission may deem proper, plus or minus such return as the Commission may prescribe from time to time upon such net changes of the physical property as are reported to and approved for rate-making purposes by the Commission. In determining the net changes of the physical property, the Commission may, in its discretion, deduct from gross additions to such physical property the amount charged to operating expenses for depreciation or, in lieu thereof, it may determine such net changes by deducting retirements from the gross additions: Provided, That the Commission, in determin-

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without discussing § 310 (b), the court declared § 310 (a) unconstitutional because it permitted the Commission to fix a temporary rate based upon the single factor of original cost less depreciation.¹⁰ The Commission, however, did not confine itself to that one element in setting the fair value of the appellee's property, for the purpose of temporary rates, at \$5,250,000. It gave weight to reproduction cost, original cost, going concern value, and the necessity for working capital, and it allowed on this rate base a return of more than 6 per cent. This, of course, satisfies the requirement of § 310 (a) that the temporary rates shall produce not less than 5 per cent on the "original cost, less accrued depreciation."

[3] Appellee's first contention is that the decree may be sustained for the sole reason that the Commission should have proceeded under subsection (b) because the appellee does not have continuing property records. As the conclusion of the lower court on this point is not supported by a state decision, we analyze for ourselves the provisions of the sections. It is clear from the language of § 310 (a) that it is applicable not only to public utilities whose reports to the Commission show the original cost of their physical property but also to those whose

original cost is not so shown. The last clause of the section authorizes the Commission to estimate such cost. There is no provision in § 310 (a) which limits its application to those utilities which maintain the continuing property records of § 502.¹¹ Section 310 (b), see note 9, furnishes a partial alternative for § 310 (a). Where there are no continuing property records, as provided by § 502, the Commission must in fixing the temporary rate arrange for at least a 5 per cent return on original cost under (a) or the return of an operating income under (b) equal to that for the year 1935 or a subsequent year, as determined by the Commission.

[4, 5] Appellee urges next that the section permits the Commission to disregard present cost, depreciate original cost, omit indirect and overhead items of construction, and exclude allowances for working capital or going concern value. Although these items were considered by the Commission, the appellee contends that the order is invalid because § 310 (a) might have been complied with by providing a return of 5 per cent on the original cost depreciated. The argument seems to be that a statute which permits an unconstitutional determination is invalid, even though it is actually applied in a constitutional manner.¹²

ing the basis for temporary rates, may make such adjustments in the annual report data as may, in the judgment of the Commission, be necessary and proper." (66 PS § 1150.)

¹⁰ Edison Light & P. Co. v. Driscoll (1938) 25 F. Supp. 192, 25 P.U.R.(N.S.) 441.

¹¹ P. L. 1053, Purdon's Pa. Stat. Ann. 1938 Supp. title 66, § 1212. "Continuing property records.—The Commission may require any public utility to establish, provide, and maintain as a part of its system of accounts, continuing property records, including a list or inventory of all the units of tangible property used or useful in the pub-

28 P.U.R.(N.S.)

lic service, showing the current location of such property units by definite reference to the specific land parcels upon which such units are located or stored; and the Commission may require any public utility to keep accounts and records in such manner as to show, currently, the original cost of such property when first devoted to the public service, and the reserve accumulated to provide for the depreciation thereof."

¹² Cf. Panama Ref. Co. v. Ryan (1935) 293 U. S. 388, 420, 79 L. ed. 446, 458, 55 S. Ct. 241; Wuchter v. Pizzutti (1928) 276 U. S. 13, 24, 72 L. ed. 446, 451, 48 S. Ct. 259, 57

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The Commission drew the order in accord with the prior ruling of the middle district court on a former order in this rate proceeding.¹³ The former order had also fixed temporary rates but had not set out the findings of value deemed essential by the court. Although the reversal of the Commission's order had actually turned on the failure to show the factual basis for the rates, as the district court had stated that compliance with *Smyth v. Ames*¹⁴ was necessary in temporary rate making, the Commission based the order now under review on evidence requisite under that rule. By taking this position, it interprets the statute as requiring consideration of elements other than original cost in fixing temporary rates. It is not suggested that the Commission omitted consideration of any necessary element in the present order. If we assume with the appellee that the constitutionality of a delegation of rate-making authority is to be tested by what a rate-making body may rightfully do under the delegation rather than what it does, appellee's case is advanced not one whit. We have here an interpre-

tation of the Pennsylvania statute by the board charged with its enforcement that it must weigh all the essential elements of valuation required by our past decisions.

There is nothing in the language of § 310 (a) which requires a different construction. The Commission is authorized to fix temporary rates. There is no requirement as to how the rates are to be determined, except that they shall be sufficient to return a given minimum—not less than 5 per cent on the original cost, less depreciation. The language authorizing the fixing of temporary rates is cast, except as to the limitation just referred to, in much the same pattern as the language of § 309 authorizing the determination of permanent rates. The latter section reads: “. . . the Commission shall determine the just and reasonable rates. . . .” A different construction would raise the novel and important question of the constitutionality of a temporary rate, based solely on depreciated original cost, with provision for recoupment of the loss from insufficient temporary rates.¹⁵ In the absence of an authoritative state de-

A.L.R. 1230; *People v. Klink Packing Co.* (1915) 214 N. Y. 121, 138, 108 N. E. 278, Ann. Cas. 1916D, 1051; *Montana Co. v. St. Louis Min. & Mill. Co.* (1894) 152 U. S. 160, 170, 38 L. ed. 398, 400, 14 S. Ct. 506. But see *New York ex rel. Hatch v. Reardon* (1907) 204 U. S. 152, 160, 51 L. ed. 415, 422, 27 S. Ct. 188, 9 Ann. Cas. 736; *Tyler v. Judges of Court of Registration* (1900) 179 U. S. 405, 410, 45 L. ed. 252, 254, 21 S. Ct. 206; *Jacobson v. Massachusetts* (1905) 197 U. S. 11, 37, 49 L. ed. 643, 654, 25 S. Ct. 358, 3 Ann. Cas. 765; *New York ex rel. Lieberman v. Van De Carr* (1905) 199 U. S. 552, 562, 50 L. ed. 305, 310, 26 S. Ct. 144; *Home Teleph. & Teleg. Co. v. Los Angeles* (1908) 211 U. S. 265, 278, 53 L. ed. 176, 184, 29 S. Ct. 50.

¹³ *Edison Light & P. Co. v. Driscoll* (1937) 21 F. Supp. 1, 20 P.U.R.(N.S.) 353.

¹⁴ (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418.

¹⁵ “(e) Temporary rates, so fixed, determined, and prescribed under this section shall be effective until the final determination of the rate proceeding, unless terminated sooner by the Commission. In every proceeding in which temporary rates are fixed, determined, and prescribed under this section, the Commission shall consider the effect of such rates in fixing, determining, and prescribing rates to be thereafter demanded or received by such public utility on final determination of the rate proceeding. If, upon final disposition of the issues involved in such proceeding, the rates as finally determined, are in excess of the rates prescribed in such temporary order, then such public utility shall be permitted to amortize and recover, by means of a temporary increase over and above the rates finally determined, such sum as shall represent the difference between the gross income obtained from the rates prescribed in such temporary order and the gross income which would have

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cision, we are reluctant to accept a construction which brings forward that issue, particularly when the case may reasonably be determined upon the interpretation of the officials of the state charged with the administration of the act.¹⁶ This course observes the very salutary rule that "this court will not decide an issue of constitutionality if the case may justly and reasonably be decided under a construction of the statute under which the act is clearly constitutional."¹⁷

Confiscation.—There remains for examination the appellee's argument that the decree of the district court enjoining the enforcement of the order should be sustained because it is confiscatory. The Commission, as of November 30, 1937 (21 P.U.R. (N.S.) 328) found the rate base, revenue, expenses, and rate, as set out below.¹⁸ Appellee urges here that the Commission's figures are erroneous in the following particulars: (1) The rate base should be \$5,866,081; (2) the rate should be 7½ per cent; (3) two items of expense, disallowed by

the Commission should be added to the operating expenses, (a) some increase in annual salaries and (b) rate case expenses on books to November 15, 1937; (4) allowance should be made for a prospective loss of annual profit by reason of the loss of a large customer, through abandonment of railway service by York Railways Company.

(1) The Commission estimated the original cost as of December 31, 1936, at \$4,576,169.73. The company estimated the original cost as of November 30, 1936, exclusive of financing charges, at \$4,619,364 and its book cost as of December 31, 1936, at \$4,578,793. If, to the highest of these items, we add \$164,000 for working capital and \$142,851.07, representing net additions to September 30, 1937, the amounts claimed by the company, the original cost rate base is found to be not more than \$4,926,215.07.

[6, 7] The Commission excluded the cost of financing because there was no evidence of any actual expenditures for such purpose or of any studies of

been obtained under the rates finally determined if applied during the period such temporary order was in effect." (66 PS § 1150e.) Cf. *Prendergast v. New York Teleph. Co.* 262 U. S. 43, 67 L. ed. 853, P.U.R.1923C, 719, 43 S. Ct. 466; *Bronx Gas & E. Co. v. Maltbie* (1936) 271 N. Y. 364, 14 P.U.R.(N.S.) 337, 3 N. E. (2d) 512.

¹⁶*Fox v. Standard Oil Co.* (1935) 294 U. S. 87, 97, 79 L. ed. 780, 787, 55 S. Ct. 333; *Union Ins. Co. v. Hoge* (1859) 21 How. 35, 66, 16 L. ed. 61, 68.

¹⁷*Thompson v. Consolidated Gas Utilities Corp.* (1937) 300 U. S. 55, 75, 81 L. ed. 510, 521, 57 S. Ct. 364, and cases cited; cf. *Blodgett v. Holden* (1927) 275 U. S. 142, 148, 72 L. ed. 206, 210, 48 S. Ct. 105; *Federal Trade Commission v. American Tobacco Co.* (1924) 264 U. S. 298, 307, 68 L. ed. 696, 701, 44 S. Ct. 336, 32 A.L.R. 786; *Texas v. Eastern Texas R. Co.* 258 U. S. 204, 217, 66 L. ed. 566, 572, P.U.R.1922D, 277, 42 S. Ct. 281.

¹⁸ Rate base or fair value of property	\$5,250,000.00
Rate of return 6%	
Required return	315,000.00
Revenue after reduction	\$1,767,320.00
Operating expenses	\$1,033,898.00
Taxes	206,400.00
Annual depreciation	142,531.00
Estimated return	384,500.00

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such cost. We find no error in this.¹⁹ There was here no foundation for an estimate.²⁰ Appellee's suggestion that evidence supporting its claim is found in the capitalization chart of York Railways Company, the owner of appellee's common stock, is not accepted. This shows the discount, \$298,825, paid by the parent company on \$2,706,000 face amount of bonds of various issues between 1909 and 1925. It appears that \$1,027,904 of the proceeds was expended for construction work of the York Edison Company, apparently appellee's predecessor. Nothing is shown as to the cost of this money to the appellee. It may have given notes for or been charged with this exact amount, without a finance charge. The financing cost to appellee may have been covered by the interest rate.

[8, 9] The Commission made no specific allowance for going concern value. It did, however, state that it had weighed the going concern value with other factors to determine fair value. It gave practical effect to this consideration when it fixed fair value several hundred thousand dollars in excess of its average of original and reproduction cost, both depreciated. In the computations by the company of original and reproduction costs, allowances were made for the overhead ex-

pense of creating the aggregate of land, buildings, and equipment, making up the utility. No tangible evidence of any unusual situation justifying any definite further allowance appears in the testimony of appellee's witness Seelye. The plant of the utility without the utilization of its production by the community would be of little value. Expenditures to secure customers through advertisement and solicitation, as well as to install connections do not appear separate from the ordinary operating and construction costs. The appellee points to the character of the territory served, the company's ability to earn, the efficiency of the management, the adequate available power supply and the excellent capital structure as indicative of a going concern value above tangible property plus overhead. To appraise these elements apart from and in addition to reasonable cost figures would require evidence of a failure on the part of the Commission to give reasonable weight to these factors. This evidence is lacking here.²¹

[10, 11] For depreciated reproduction cost as of November 30, 1936, the Commission accepted the estimate of the company for direct costs, \$3,981,347. It added 19 per cent, \$756,456, for indirect costs and reached a total of \$4,737,803. This finding re-

¹⁹ *Wabash Valley Electric Co. v. Young*, 287 U. S. 488, 500, 77 L. ed. 447, 455, P.U.R. 1933A, 433, 53 S. Ct. 234; *Galveston Electric Co. v. Galveston*, 258 U. S. 388, 397, 66 L. ed. 678, 683, P.U.R.1922D, 159, 42 S. Ct. 351.

²⁰ *Cf. Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 309, 78 L. ed. 1267, 1280, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647; *Los Angeles Gas & E. Corp. v. California R. Commission*, 289 U. S. 287, 310, 77 L. ed. 1180, 1195, P.U.R.1933C, 229, 53 S. Ct. 637.

²¹ *Denver Union Stock Yard Co. v. United States* (1938) 304 U. S. 470, 478, 82 L. ed.

1469, 1477, 24 P.U.R.(N.S.) 155, 58 S. Ct. 990; *St. Joseph Stock Yards Co. v. United States* (1936) 298 U. S. 38, 62, 80 L. ed. 1033, 1046, 14 P.U.R.(N.S.) 397, 56 S. Ct. 720. *Cf. Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, *supra*; *St. Joseph Stock Yards Co. v. United States* (1935) 11 F. Supp. 322, 334; *Des Moines Gas Co. v. Des Moines*, 238 U. S. 153, 59 L. ed. 1244, P.U.R.1915D, 577, 35 S. Ct. 811; *McCardle v. Indianapolis Water Co.* (1926) 272 U. S. 400, 413, 71 L. ed. 316, 325, P.U.R.1927A, 15, 47 S. Ct. 144.

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duced the indirect costs from the 24.3 per cent claimed by the company. Evidence was introduced before the Commission supporting each percentage estimate. The amount of these indirect costs likely to be incurred is too uncertain for us to conclude that the percentage adopted is erroneous.²² We cannot see that the failure of the Commission's witness Bierman to inspect the property made less valuable his estimate on the proper percentage to be applied for indirect costs. These indirect costs are of the character of interest, supervision, cost of financing, taxes, and legal expense.

The utility states that the Commission, in fixing the reproduction cost, erred by refusing to consider the effect of a claimed increase of prices. The Commission, on November 30, 1937, *supra*, fixed reproduction cost upon a computation based by the utility upon prices as of November 30, 1936. This showed a gross cost of \$5,572,134, depreciated and reduced by the Commission, as explained in the preceding paragraph, to \$4,737,803. The utility presented a further computation, showing as of May 31, 1937, that increased prices, due to a rising level, would increase the gross cost to \$6,019,832. The argument is that the later estimate should have been considered.²³ Proportionally reduced to accord with the action of the Commission, this latter figure would become \$5,118,465. If to this higher reproduction cost we add working capital, there appears a reproduction cost depreciated figure of \$5,282,465.

It is furthermore to be observed that

the Commission's figures do not differ far as to fair value, from the estimate of an important witness for the utility, Mr. Seelye, who testified on March 12, 1937, that the fair value was not less than \$5,500,000 and said later in answer to the Commissioner's question that the fair value, in his opinion, was \$5,500,000. This estimate was reiterated on December 20, 1937, in the affidavits of Mr. Seelye and Mr. Wayne, the president of the company, in support of the motion for temporary injunction.

For the purpose of passing upon the issue of confiscation in the temporary rates, we shall accept \$5,500,000 as the fair value of the property as of November 30, 1937.

[12-14] (2) The rate of return was fixed by the Commission at 6 per cent. Witnesses for the utility brought out facts deemed applicable in the determination of a proper rate of return on the fair value of the property. Their evidence took cognizance of the yield of bonds, preferred and common stocks of selected comparable utilities, the stagnant market for new issues, prevailing cost of money, the implications of the possible substitution of some governmentally operated or financed utilities for those privately owned and the dangers of a fixed schedule of rates in the face of possible inflation. From these factors they deduced that a proper rate of return would be from 7.8 per cent to 8 per cent. An accounting expert of the Commission countered with tables showing yields of bonds of utilities; the yield to maturity of Pennsylvania

²² Dayton Power & Light Co. v. Ohio Pub. Utilities Commission, *supra*.

²³ McCart v. Indianapolis Water Co. (1938) 302 U. S. 419, 82 L. ed. 336, 21 P.U.R.(N.S.) 465, 58 S. Ct. 324.

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public utility securities, approved by the Commission between July 1, 1933, and May 7, 1937, long term and actually sold for cash to nonaffiliated interests; yield of Pennsylvania electric utilities; financial and operating statistics of Pennsylvania electric utilities; money rates, and other material information. He concluded 5.5 per cent was a reasonable rate of return.

It must be recognized that each utility presents an individual problem.²⁴ The answer does not lie alone in average yields of seemingly comparable securities or even in deductions drawn from recent sales of issues authorized by this same Commission. Yields of preferred and common stocks are to be considered, as well as those of the funded debt. When bonds and preferred stocks of well-seasoned companies can be floated at low rates, the allowance of an over-all rate return of a modest percentage will bring handsome yields to the common stock. Certainly the yields of the equity issues must be larger than that for the underlying securities. In this instance, the utility operates in a stable community, accustomed to the use of electricity and close to the capital markets, with funds readily available for secure investment. Long operation and adequate records make forecasts of net operating revenues fairly certain. Under such circumstances a 6 per cent return after all allowable charges cannot be confiscatory.

[15, 16] (3) and (4). The utility urges that two items of expense and a prospective loss should be added to the operating expenses, allowed by the Commission, of \$1,382,829. The most important of these items is the rate case expenses. The company by its Exhibit 21 shows these incurred to November 15, 1937, to be \$178,374.50. The Commission from Exhibit 23 found them to be \$127,935 for the twelve months ending September 30, 1937. The difference probably comes from the expenses before and after the period considered by the Commission. We assume the higher figures to be correct. As the Commission concluded that the prior rates of the company were obviously excessive, it allowed nothing for expense in defending them. Consequently there is no discussion of the reasonableness of the amount of the company's charge and we accept them as reasonable. Even where the rates in effect are excessive, on a proceeding by a Commission to determine reasonableness, we are of the view that the utility should be allowed its fair and proper expenses for presenting its side to the Commission. We do not refer to expense of litigation in the courts. "A different case would be here if the company's complaint had been unfounded, or if the cost of the proceeding had been swollen by untenable objections."²⁵

In the allowance of these expenses,

²⁴ United R. & Electric Co. v. West, 280 U. S. 234, 249, 74 L. ed. 390, 408, P.U.R. 1930A, 225, 50 S. Ct. 123; Willcox v. Consolidated Gas Co. (1909) 212 U. S. 19, 48, 53 L. ed. 382, 398, 29 S. Ct. 192, 48 L.R.A. (N.S.) 1134, 15 Ann. Cas. 1034; Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission, 262 U. S. 679, 692, 67 L. ed. 1176, 1182, P.U.R.1923D,

11, 43 S. Ct. 675; Knoxville v. Knoxville Water Co. (1909) 212 U. S. 1, 17, 53 L. ed. 371, 381, 29 S. Ct. 148.

²⁵ West Ohio Gas Co. v. Ohio Pub. Utilities Commission (1935) 294 U. S. 63, 74, 79 L. ed. 761, 770, 6 P.U.R.(N.S.) 499, 456, 55 S. Ct. 316; see Wabash Valley Electric Co. v. Young, 287 U. S. 488, 500, 77 L. ed. 447, 455, P.U.R.1933A, 433, 53 S. Ct. 234.

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the period over which they are to be amortized will depend upon the character of services received or disbursements made. There could rarely be an anticipation of annually recurring charges for rate regulation. Under the circumstances here presented where full statistics on investment, inventory and labor requirements have been made which, as cumulated, will form largely the basis of all future negotiations, we are of the opinion that amortization over a 10-year period is reasonable.²⁶ As such an adjustment produces an estimated return very close to the reasonable rate, even with the addition to the operating expenses of the other items of increased salaries, \$20,593, and prospective loss of annual profit, \$15,089, we do not enter into a discussion of them. Experience will add its weight to the other evidence on further hearing. The note below shows the calculation.²⁷

At best, these estimates are prophecies of expected returns. The incalculable factors of business activity, unanticipated demand or forbearance, substitution, and other variables lead us to approximations. We are satisfied the reduction required is not shown to be confiscatory.

Reversed.

Mr. Justice FRANKFURTER, concurring: The decree below was clearly wrong. But in reversing it, the court's opinion appears to give new vitality needlessly to the mischievous formula for fixing utility rates in *Smyth v. Ames* (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418. The force of reason, confirmed by events, has gradually been rendering that formula moribund by revealing it to be useless as a guide for adjudication. Experience has made it overwhelmingly clear that *Smyth v. Ames* and the uses to which it has been put represented an attempt to erect temporary facts into legal absolutes. The determination of utility rates—what may fairly be exacted from the public and what is adequate to enlist enterprise—does not present questions of an essentially legal nature in the sense that legal education and lawyers' learning afford peculiar competence for their adjustment. These are matters for the application of whatever knowledge economics and finance may bring to the practicalities of business enterprise. The only relevant function of law in dealing with this intersection of government and enterprise is to secure observance of those procedural safeguards in the exercise of legislative powers which

²⁶ *Wabash Valley Electric Co. v. Young, supra*; *West Ohio Gas Co. v. Ohio Pub. Utilities Commission, supra*.

²⁷ Compare with the computation of the Commission, note 18.

Rate base or fair value of property		\$5,500,000.00
Rate of return 6%		
Required return		330,000.00
Revenue after reduction	\$1,767,329.00	
Operating expenses	\$1,033,898.00	
Taxes	206,400.00	
Annual depreciation	142,531.00	
Rate expense, 10-year amortization	17,838.00	
Salary increase	20,593.00	
Prospective loss	15,089.00	1,436,349.00
Estimated return		330,980.00

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are the historic foundations of due process.

Mr. Justice Bradley nearly fifty years ago made it clear that the real issue is whether courts or Commissions and legislatures are the ultimate arbiters of utility rates (dissenting, in *Chicago, M. & St. P. R. Co. v. Minnesota ex rel. R. & Warehouse Commission* [1890] 134 U. S. 418, 461, 33 L. ed. 970, 983, 10 S. Ct. 462, 702, 3 Inters. Com. Rep. 209). Whatever may be thought of the wisdom of a broader judicial rôle in the controversies between public utilities and the public, there can be no doubt that the tendency, for a time at least, to draw fixed rules of law out of *Smyth v. Ames*, *supra*, has met the rebuff of facts. At least one important state has for decades gone on its way unmindful of *Smyth v. Ames*, and other states have by various proposals sought to escape the fog into which speculations based on *Smyth v. Ames* have enveloped the practical task of administering systems of utility regulation.

Smyth v. Ames should certainly not be invoked when it is not necessary to do so. The statute under which the present case arose represents an effort to escape *Smyth v. Ames* at least as to temporary rates. It is the result of a conscientious and informed endeavor to meet difficulties engendered

by legal doctrines which have been widely rejected by the great weight of economic opinion,²³ by authoritative legislative investigations,²⁹ by Utility Commissions throughout the country,³⁰ and by impressive judicial dissents.³¹ As a result of this long process of experience and reflection, the two states in which utilities play the biggest financial part—New York and Pennsylvania—have evolved the so-called recoupment scheme for temporary rate fixing (thereby avoiding some of the most wasteful aspects of rate litigation) as a fair means of accommodating public and private interests. It is a carefully guarded device for securing “a judgment from experience as against a judgment from speculation,” *Tanner v. Little* (1916) 240 U. S. 369, 386, 60 L. ed. 691, 702, 36 S. Ct. 379, in dealing with a problem of such elusive economic complexity as the determination of what return will be sufficient to attract capital in the special setting of a particular industry and at the same time be fair to the public dependent on such enterprise.

That this court should not “decide an issue of constitutionality if the case may justly and reasonably be decided under a construction of the statute under which the act is clearly constitutional” is, as an abstract proposition, basic to our judicial obligation. But

²³ See 2 Bonbright, “The Valuation of Property,” 1081-1086, 1094-1102; 3A Sharfman, “The Interstate Commerce Commission,” 121-137.

²⁹ N. Y. State Commission on Revision of the Public Service Commission Law, Report of Commissioners, *passim* (1930).

³⁰ Proceedings of the Forty-Seventh Annual Convention of the National Association of Railroad and Utilities Commissioners, 232 et seq.; Proceedings of the Forty-Eighth An-

nual Convention of the National Association of Railroad and Utilities Commissioners, 115 et seq., 289 et seq.; Proceedings of the Forty-Ninth Annual Convention of the National Association of Railroad and Utilities Commissioners, 159 et seq.

³¹ See, e. g., *Brandeis, J., concurring, in Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission*, 262 U. S. 276, 289, 67 L. ed. 981, 985, P.U.R.1923C, 193, 43 S. Ct. 544, 31 A.L.R. 807, and bibliography therein contained.

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this is not a formal doctrine of self-restraint. Its rationale is avoidance of conflict with the legislature. The opinion from which the preceding quotation is taken and the decisions to which it refers are all cases in which constitutionality was in obvious jeopardy. It is one thing to avoid unconstitutionality even at the cost of a tortured statutory construction. It is quite another to recognize the validity of a statute directed expressly to the situation in hand and so employed by the state authorities, when constitutionality of that statute is as incontestably clear as the decision of the

New York court of appeals has demonstrated it to be in sustaining the sister statute of the Pennsylvania act, *Bronx Gas & E. Co. v. Maltbie* (1936) 271 N. Y. 364, 14 P.U.R.(N.S.) 337, 3 N. E. (2d) 512. The court's opinion in the present case does not avoid issues of constitutionality. It accepts the much more dubious constitutional doctrines of *Smyth v. Ames* and its successors to solve the very easy constitutional issues raised by the Pennsylvania Act.

Mr. Justice Black concurs in the above views.

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Rochester Telephone Corporation v. United States et al.

[No. 481.]

(— U. S. —, 83 L. ed. —, 59 S. Ct. 754.)

Appeal and review, § 8 — Orders reviewable — Negative and affirmative.

1. Any distinction, as such, between negative and affirmative orders, as a touchstone of jurisdiction to review the Commission's orders, serves no useful purpose, and in so far as earlier decisions have been controlled by this distinction, they can no longer be guiding, p. 79.

Appeal and review, § 8 — Orders reviewable — Determination of utility's status — Direction to obey orders.

2. An order of the Federal Communications Commission classifying a telephone company as subject to all common carrier provisions of the Communications Act, and therefore subject to all orders of the telephone division of the Commission, is reviewable as it is not a mere abstract declaration regarding status, nor is it a stage in an incomplete process of administrative adjudication, but it determines the status and directs obedience to previously formulated mandatory orders addressed generally to all carriers amenable to the Commission's authority, p. 79.

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Intercorporate relations, § 14.1 — Intercorporate control — Issue of fact.

3. The determination by the Communications Commission of the question whether one telephone company is controlled by another is the determination of an issue of fact governed by the special circumstances of each case and not by artificial tests of control, p. 90.

Appeal and review, § 28.1 — Decision of Federal Communications Commission — Intercorporate control.

4. A determination by the Federal Communications Commission that one telephone company exercises control over another within the meaning of the Communications Act must stand so long as there is warrant in the record for the judgment of the expert body, p. 90.

Intercorporate relations, § 14.1 — Intercompany control — Telephone companies.

5. A refusal to regard ownership by an interstate telephone company of only one-third of the common stock of another company as conclusive of the former's lack of control of the latter, so as to invalidate the Commission's finding as to control, was held to disregard actualities in such intercorporate relations, p. 90.

Appeal and review, § 8 — Negative order doctrine.

Discussion, in decision of United States Supreme Court, of prior decisions involving the "negative order" doctrine, p. 81.

Orders, § 1 — Negative and affirmative.

Discussion, in decision of United States Supreme Court, of the inappropriateness of classifying orders as "negative" and "affirmative," p. 88.

(BUTLER, J., concurs in separate opinion.)

[April 17, 1939.]

APP^{EAL} from decree of District Court of three judges dismissing on the merits a bill to review an order of the Federal Communications Commission classifying a telephone company as subject to provisions of Communications Act; decree affirmed. For lower court decision see 23 F. Supp. 634, 24 P.U.R.(N.S.) 113.

APPEARANCES: T. Carl. Nixon, of Rochester, New York, argued the cause for appellant; Hugh B. Cox, of Washington, D. C., argued the cause for appellees.

Mr. Justice FRANKFURTER delivered the opinion of the court: This is an appeal, under § 238 of the Judicial Code as amended (28 USCA, § 345), from a final decree by a district court of three judges, under the

Urgent Deficiencies Act of October 22, 1913 (28 USCA, §§ 45, 47a) as extended by § 402 (a) of the Federal Communications Act (47 USCA § 402 (a)), dismissing on the merits a bill to review an order of the Federal Communications Commission.

[1, 2] At the outset a challenge to the jurisdiction of the district court confronts us. It involves those problems of administrative law which are implied by the doctrine of "negative

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orders." Inasmuch as this phrase is shorthand for a variety of situations, sharp heed must be given to the precise circumstances—inter alia, the statutory provisions for review, the terms of the contested order, the grounds of objection to it—which in this and other cases have invoked the doctrine.

Section 2(b) of the Communications Act of [June 19] 1934 provides that, with certain exceptions not here material, the Communications Commission shall not have jurisdiction over any carrier "engaged in interstate or foreign communication solely through physical connection with the facilities of another carrier not directly or indirectly controlling or controlled by, or under direct or indirect common control with, such carrier." [47 USCA § 152.] The appellant, Rochester Telephone Corporation (hereafter called the Rochester), is a New York corporation maintaining a system of telephone communications in and around the city of Rochester. For present purposes the Rochester is to be deemed as engaged in interstate communications solely because of physical connections with the facilities of the New York Telephone Company (hereafter called the New York).

The present controversy grew out of a ruling by the Federal Communications Commission that the Rochester owed obedience to a series of orders issued by the Commission. These orders required all telephone carriers subject to the act to file schedules of their charges, copies of contracts with other telephone carriers, information

concerning their corporate and service history, their relations with affiliates, their use of franks and passes. Copies of these orders were duly served on the Rochester. No response being had, the telephone division of the Communications Commission, on October 9, 1935, ordered the Rochester to show cause why it should not be required to file responses to the general orders theretofore served upon it.¹ The Rochester answered, claiming to be outside the requirements of the act except as to matters not here questioned.

To ascertain the facts in the contested issue, the Commission appointed a trial examiner. At hearings held by him the Rochester entered a special appearance, denying the Commission's jurisdiction and contending that the burden of proof was on the Commission to show that Rochester did not come within the exclusionary provisions of § 2(b) (2). After a thorough hearing² and the submission of briefs, the examiner filed his report, to which the Rochester duly excepted. Upon the basis of these proceedings and of argument before it, the Commission, through its telephone division, sustained the findings of its chief examiner, determined that the Rochester was under the "control" of the New York and therefore not entitled to the classification of a mere connecting carrier under § 2(b) (2). Accordingly, the Commission ordered the Rochester classified "as subject to all common carrier provisions of the Communications Act of 1934, and, therefore, subject to all orders of the telephone divi-

¹ On November 13, 1935, the order was amended in matters not here relevant.

² The hearing before the examiner lasted two days; 221 pages of testimony were taken and 34 exhibits were introduced.

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sion." A petition for rehearing before the full Commission was denied.

The Rochester thereupon filed the present bill, alleging that the order entered by the Commission on November 18, 1936, pursuant to its report, was contrary to undisputed facts and erroneous as a matter of law, and that the Commission's threat to enforce it put the Rochester to the hazard of irreparable injury, and praying that the district court "make and enter its order and decree setting aside and annulling said orders of the Federal Communications Commission hereinbefore mentioned, and each and all of them, and enjoining the enforcement of said orders, except in so far as the provisions of said orders . . . have already been complied with."

The case was disposed of in the district court on the pleadings and the record before the Commission.

Below, the government made no objection to the district court's jurisdiction, nor did that court raise the question *sua sponte*.³ It sustained the Commission's action on the merits and dismissed the bill. Here, the government urges that under the doctrine of "negative orders" the Commission's order was not reviewable, but, in the alternative, supports the decree on the merits.

The relation of action by the Federal Communications Commission to the reviewing power of the courts is here for the first time. The jurisdictional objection raised by the government in this case implicates other Fed-

eral regulatory bodies as well, because the various statutory schemes for judicial review have either been carried over from the Urgent Deficiencies Act, pertaining to orders under the Acts to Regulate Commerce, or because different statutory provisions have by analogy been assimilated to the "negative order" doctrine. That doctrine has not had wholly plain sailing in the many cases, both here and in the lower Federal courts, since it first got under way in 1912, in *Procter & G. Co. v. United States* (1912) 225 U. S. 282, 56 L. ed. 1091, 32 S. Ct. 761.

The important procedural problems with which this case is entangled therefore call for clarification.

The prior decisions involving the "negative order" doctrine fall into three categories:⁴

(1) Where the action sought to be reviewed may have the effect of forbidding or compelling conduct on the part of the person seeking to review it, but only if some further action is taken by the Commission. Such a situation is presented by an attempt to review a valuation made by the Interstate Commerce Commission which has no immediate legal effect although it may be the basis of a subsequent rate order.

(2) Where the action sought to be reviewed declines to relieve the complainant from a statutory command forbidding or compelling conduct on his part. The most obvious case is a denial of permission by the Interstate

³ Under *United States v. Corrick* (1936) 298 U. S. 435, 440, 80 L. ed. 1263, 1267, 56 S. Ct. 829, and *United States v. Griffin* (1938) 303 U. S. 226, 229, 82 L. ed. 764, 766, 58 S. Ct. 601, the doctrine of "negative orders" implies a jurisdictional defect which courts must consider *sua sponte*.

⁴ All except one of the prior decisions of this court on the "negative order" doctrine involved review of action by the Interstate Commerce Commission. *United States v. Corrick*, *supra*, note 3, involved review of action by the Secretary of Agriculture under the Packers and Stockyards Act.

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Commerce Commission for a departure from the long-short haul clause.

(3) Where the action sought to be reviewed does not forbid or compel conduct on the part of the person seeking review but is attacked because it does not forbid or compel conduct by a third person. A familiar example is that of a shipper requesting the Interstate Commerce Commission for an order compelling the carrier to adopt certain rates or practices which the Commission, on the merits, declines. Another instance is where the Commission authorizes the carrier to depart from the long-short haul clause and a shipper adversely affected seeks to have the authorization set aside.

In group (1) the order sought to be reviewed does not of itself adversely affect complainant but only affects his rights adversely on the contingency of future administrative action. In view of traditional conceptions of Federal judicial power, resort to the courts in these situations is either premature or wholly beyond their province. Thus, orders of the Interstate Commerce Commission setting a case for hearing despite a challenge to its jurisdiction,⁵ or rendering a tentative⁶ or final valuation⁷ under the Valuation Act, although claimed to be inaccurate, or holding that a carrier is within the Railway Labor Act and therefore amenable to the National Mediation Board, are not reviewable.⁸

The governing considerations which

keep such orders without the area of judicial review were thus summarized for the court by Mr. Justice Brandeis in denying reviewability of a "final valuation" under the Valuations Act [March 1, 1913, 37 Stat. at L. 701, Chap. 92, 49 USCA § 19a]: "The so-called order here complained of is one which does not command the carrier to do, or to refrain from doing, anything; which does not grant or withhold any authority, privilege or license; which does not extend or abridge any power or facility; which does not subject the carrier to any liability, civil or criminal; which does not change the carrier's existing or future status or condition; which does not determine any right or obligation." *United States v. Los Angeles & S. L. R. Co. supra*, at p. 359 of P.U.R. 1927B.

Plainly the denial of judicial review in these cases does not derive from a regard for the special functions of administrative agencies. Judicial abstention here is merely an application of the traditional criteria for bringing judicial action into play. Partly these have been written into Art. 3 of the Constitution by what is implied from the grant of "judicial power" to determine "cases" and "controversies," Art. 3, § 2, U. S. Constitution.⁹ Partly they are an aspect of the procedural philosophy pertaining to the Federal courts whereby, ever since the first Judiciary Act, Congress has been

⁵ *United States v. Illinois C. R. Co.* (1917) 244 U. S. 82, 61 L. ed. 1007, 37 S. Ct. 584. Compare *Federal Power Commission v. Metropolitan Edison Co.* (1938) 304 U. S. 375, 82 L. ed. 1408, 24 P.U.R.(N.S.) 394, 58 S. Ct. 963.

⁶ *Delaware & H. Co. v. United States*, 266 U. S. 438, 69 L. ed. 369, P.U.R.1925C, 394, 45 S. Ct. 153.

⁷ *United States v. Los Angeles & S. L. R.* 28 P.U.R.(N.S.)

Co. 273 U. S. 299, 71 L. ed. 651, P.U.R. 1927B, 357, 47 S. Ct. 413.

⁸ *Shannahan v. United States* (1938) 303 U. S. 596, 82 L. ed. 1039, 58 S. Ct. 732; compare *Shields v. Utah Idaho C. R. Co.* (1938) 305 U. S. 177, 182-184, 83 L. ed. —, 59 S. Ct. 160.

⁹ *Re Hayburn's Case* (1792) 2 Dall. 409, 1 L. ed. 436, is the symbol for considerations which limit the constitutional power of the

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loath to authorize review of interim steps in a proceeding.¹⁰

Group (2) is composed of instances of statutory regulations which place restrictions upon the free conduct of the complainant. To rid himself of these restrictions the complainant either asks the Interstate Commerce Commission to place him outside the statute, or, being concededly within it, he invokes the Commission's dispensing power. In this type of situation a complainant seeking judicial review under the Urgent Deficiencies Act of adverse action by the Commission must clear three hurdles: (a) "case" or "controversy" under Art. 3; (b) the conventional requisites of equity jurisdiction; (c) the specific terms of the statute granting to the district courts jurisdiction in suits challenging "any order" of the Commission.

Where a complainant seeks the Commission's authority under the terms of a statute and the Commis-

sion's action is followed by legal consequences, as was the case in *Lehigh Valley R. Co. v. United States* (1917) 243 U. S. 412, 61 L. ed. 819, 37 S. Ct. 397, or where the Commission's order denies an exemption from the terms of the statute, as in the *Intermountain Rate Cases* (*United States v. Atchison, T. & S. F. R. Co.* [1914]) 234 U. S. 476, 58 L. ed. 1408, 34 S. Ct. 986, the road to the courts' jurisdiction seems to be clear. There is a constitutional "case" or "controversy," *Interstate Commerce Commission v. Brimson* (1894) 154 U. S. 447, 38 L. ed. 1047, 14 S. Ct. 1125, 4 *Inters. Com. Rep.* 545; the requirements of equity are satisfied if disregard of the Commission's adverse action entails threat of oppressive penalties; and the suit is within the express language of the Urgent Deficiencies Act in that it is one "to enjoin, set aside, or annul" an "order of the Commission." 28 USCA §§ 46, 47.¹¹ While

Federal courts, though that case itself never reached adjudication. See, also, *United States v. Ferreira* (1851) 13 How. 40, 14 L. ed. 42; *Muskraut v. United States* (1911) 219 U. S. 346, 55 L. ed. 246, 31 S. Ct. 250.

¹⁰ Prior to § 7 of the Act of March 3, 1891 [26 Stat. at L. 826, 828, Chap. 517, 28 USCA § 227], authorizing an appeal to the circuit court of appeals from a decree granting a preliminary injunction, review in a case not involving a final judgment was unknown in the Federal judicial system, except in so far as it was present in the practice of certification introduced by § 6 of the Act of April 29, 1802 [2 Stat. at L. 156, 159, Chap. 31]. See *United States v. Bailey* (1835) 9 Pet. 267, 9 L. ed. 124. For state court decisions the requirements for finality of the original Judiciary Act have been adhered to. Section 237, Judicial Code as amended, 28 USCA § 344. Review of action of the Federal district courts not involving final judgments can be had only in a limited class of cases dealing with interlocutory injunctions, receiver-ships, and criminal appeals. Sections 129 and 238 of the Judicial Code as amended, 28 USCA §§ 227, 345. This court, however, may take jurisdiction on certiorari before the

appellate jurisdiction of the circuit court of appeals is exhausted.

¹¹ The *Lehigh Valley R. Co. Case*, *supra*, apparently originated the statement, often made in "negative order" cases, that the risk results from the statute, not from the order. But this formula hardly squares with the actualities of the situation in that case. The Panama Canal Act, Pars. 19-21 of § 5 of the Act to Regulate Commerce, as amended, forbade community of interest between any common carrier subject to the act and a competing water carrier. Under Par. 20, jurisdiction was conferred on the Commission to determine questions of fact as to the existence of actual or potential competitive conditions, either on the application of the carrier or on the Commission's motion, its determination to be final. Under Par. 21, the Commission was given jurisdiction to extend the time within which operations otherwise prohibited by the statute might be carried on after July 1, 1914, if such extension did not reduce competition and benefited the public. After receipt of notice of the act from the Commission, the *Lehigh* applied to the Commission for a ruling that it was not subject to the act, or, in the alternative, for an extension. The Com-

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the penalties may be imposed by the statute for its violation and not for disobedience of the Commission's order, a favorable order would render the prohibitions of the statute inoperative. The complainant can come into court, of course, not to review action within the discretionary authority of the Commission to render an adverse rather than a favorable decision but because he urges errors of law outside the Commission's final say-so. Such an analysis emerges from a long sequence of cases under the Urgent Deficiencies Act viewed in the setting of general doctrines of Federal jurisdiction.

mission issued an order subjecting the Lehigh to the act and denying an extension. Thereupon the Lehigh brought a suit to set aside this order and to enjoin the Commission from enforcing it.

As a practical matter the risk of prosecution to which the Lehigh was subjected if it wished to continue to operate its boats was the result of the order. Since the Panama Canal Act provided that the Commission should find the facts under it, there could have been no prosecution without a previous finding by the Commission that the Lehigh was within the act; once such a finding was made it was subject to the rule of administrative finality. Compare *Keogh v. Chicago & N. W. R. Co.* (1922) 260 U. S. 156, 67 L. ed. 183, 43 S. Ct. 47. Therefore the Commission's order that the Lehigh was subject to the Panama Canal Act was responsible for the risk, as much so as if it had expressly commanded the Lehigh to stop running its boat lines. And assuming the Lehigh was within the prohibition of the statute, the Commission's order denying an exception had the same practical effect as a direct command. *Intermountain Rates Cases* (United States v. Atchison, T. & S. F. R. Co.) *supra*.

Piedmont & N. R. Co. v. United States (1930) 280 U. S. 469, 74 L. ed. 551, 50 S. Ct. 192, presents a more complicated situation. Section 1 (18-22) of the Act to Regulate Commerce, as amended, prohibits any common carrier by rail subject to the act from extending its lines or constructing new lines without a certificate of convenience and necessity. This requirement did not apply to "interurban electric railways, which are not operated as a part or parts of a general steam railroad system of transportation." Upon an application for a certificate by the Piedmont & Northern, coupled with a motion to dismiss on the ground that it was an "inter-

tion. On the other hand, the result in the Lehigh Valley R. Co. Case, *supra*, was reached in the earlier phases of modern administrative law and did not deal with its specific jurisdictional problems in the perspective of underlying principles governing Federal equitable jurisdiction. In consequence, the phrase "negative orders" gained currency as though it were descriptive of some technical doctrine of jurisdiction having peculiar relevance to judicial review of orders of the Interstate Commerce Commission and comparable regulatory bodies.¹²

This brings us to the cases in group

urban electric" railway, for which no certificate was required, the Commission denied the motion to dismiss and denied the certificate on the merits. The bill to enjoin the Commission from taking any proceedings against the Piedmont & Northern under this order attacked the action of the Commission solely on its assumption of jurisdiction. The court held the order was not reviewable, on the ground that the order did not adjudicate the railroad's status, did not command it to do anything, but only had the effect of increasing the Piedmont's doubts as to the correctness of its construction of the statute. To be sure, statutory construction is a judicial function. But this is to view the matter too abstractly. For the Commission itself had instituted the system whereby it requested preliminary submission to it of the status of "interurban roads." Such a decision was at least the equivalent of a threat of prosecution under the statute, and, in fact, considerable weight is given to administrative practice in ascertaining the meaning of such legislation. Compare *United States v. Hubbard*, 266 U. S. 474, 69 L. ed. 389, P.U.R.1925C, 388, 45 S. Ct. 160.

¹² The initial decision in this group of cases, the *Intermountain Rate Cases* (United States v. Atchison, T. & S. F. R. Co.) *supra*, held reviewable the action of the Commission in refusing to grant requested consent to depart from the long-short haul clause. (Section 4 of the Act to Regulate Commerce, as amended.) While this case would seem to control the Lehigh Valley R. Co. Case, *supra*, and at least to be persuasive in the Piedmont & N. R. Co. Case, *supra*, it was not mentioned in them. After these two cases, subsequent decisions in this group indicated that the "negative order" doctrine might prevent review of the refusal by the Secretary of Agriculture to accept rates for filing, the Packers

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(3). Here review is sought of action by the Commission which affects the complainant because it does not forbid or compel conduct with reference to him by a third person. This type of situation is illustrated by *Procter & G. Co. v. United States* (1912) 225 U. S. 282, 56 L. ed. 1091, 32 S. Ct. 761. Since this case gave rise to the notion that there is a specialized jurisdictional doctrine pertaining to "negative orders," it calls for reëxamination. *Procter & Gamble Co.* filed a complaint with the Interstate Commerce Commission to set aside demurrage rules that imposed charges on private cars left unloaded for over forty-eight hours on private tracks. The Commission dismissed the complaint on the ground that the rules were within the carriers' authority to make conditions for the acceptance of private cars. *Procter & Gamble* then petitioned the commerce court to annul the Commission's action and to enjoin the carriers from enforcing the rules. The commerce court took jurisdiction but found the Commission's action to be within its authority. On appeal this court held that the commerce court erred in taking jurisdiction and remanded the cause for dismissal.

Clearly *Procter & Gamble* was authorized under § 13 of the Act to Regulate Commerce to institute the proceedings before the Commission. Since it asserted a legal right under

that act to have the Commission apply different principles of law from those which led the Commission to dismiss the complaint, the ingredients for an adjudication—constituting a case or controversy—were present. Compare *Interstate Commerce Commission v. Brimson, supra*; *Interstate Commerce Commission v. Baird* (1904) 194 U. S. 25, 38, 48 L. ed. 860, 866, 24 S. Ct. 563. Judicial relief would be precisely the same as in the recognized instances of review by courts of Commission action: if the legal principles on which the Commission acted were not erroneous, the bill would be ordered dismissed; if the Commission was found to have proceeded on erroneous legal principles, the Commission would be ordered to proceed within the framework of its own discretionary authority on the indicated correct principles. The requisites of equity have of course to be satisfied, but by the conventional criteria. They were satisfied in the *Procter & G. Co. Case, supra*, since the bill sought to avoid a multiplicity of suits. Finally, the shipper was within the express language of Congress authorizing suits "to enjoin, set aside, annul, . . . any order of the Interstate Commerce Commission." To be sure the opinion in the *Procter & G. Co. Case, supra*, partly yielded to the government's main contention in that case that the jurisdictional statute only applied

and Stockyards Act prohibiting the charging of rates except those on file with the Secretary, *United States v. Corrick* (1936) 298 U. S. 435, 80 L. ed. 1263, 56 S. Ct. 829, and of the refusal to grant an increase in rates of compensation for carrying of mail, the *Railway Mail Pay Act of [July 28, 1916, 39 Stat. at L. 412, Chap. 261]* requiring the carrier to carry the mail at the rate set, *United States v. Griffin* (1938) 303 U. S. 226, 82 L. ed. 764, 58 S. Ct. 601. But in both these decisions

the result reached was supported by factors irrelevant to the present discussion. On the other hand, in *Powell v. United States* (1937) 300 U. S. 276, 81 L. ed. 643, 57 S. Ct. 470, action of the Commission, striking from its files a tariff on the ground that a point was not served by the carrier, was held subject to review as a command to the railway which had filed the tariff not to give the service covered by the tariff.

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where the order complained of was one which was to be enforced by the Commission. More recent decisions of this court, however, have dispensed with this requisite for review.¹³

The impelling consideration underlying the decision in the Procter & G. Co. Case, *supra*, did not concern technical procedure. It was part of the process of adjusting relations between the Interstate Commerce Commission and the courts to effectuate the purposes of the Commission. This is made abundantly clear by the general atmosphere of the opinion as well as by its language,¹⁴ particularly when

regard is had to the fact that the court's spokesman was Chief Justice White, who had such a large share in developing modern administrative law.¹⁵ While the Interstate Commerce Commission had been in existence since 1887, the enlargement of its powers through the Hepburn Act, in [June 29] 1906,¹⁶ and the Mann-Elkins Act, [June 18] 1910,¹⁷ the establishment of similar agencies in many states following the lead of New York¹⁸ and Wisconsin,¹⁹ the widespread recognition that these specific instances marked a general movement,²⁰ made increasingly manifest the place of ad-

¹³ Chicago Junction Case (Baltimore & O. R. Co. v. United States [1924]) 264 U. S. 258, 68 L. ed. 667, 44 S. Ct. 317; Venner v. Michigan C. R. Co. (1926) 271 U. S. 127, 70 L. ed. 868, 46 S. Ct. 444; Colorado v. United States (1926) 271 U. S. 153, 70 L. ed. 878, 46 S. Ct. 452; Claiborne-Annapolis Ferry Co. v. United States (1932) 285 U. S. 382, 76 L. ed. 808, 52 S. Ct. 440; United States v. Idaho (1936) 298 U. S. 105, 80 L. ed. 1070, 56 S. Ct. 690.

¹⁴ " . . . we have learned of no instance where it was held or even seriously asserted, that as to subjects which in their nature were administrative and within the competency of the Commission to decide, there was power in a court, by an exercise of original action, to enforce its conceptions as to the meaning of the act to regulate commerce by dealing directly with the subject irrespective of any prior affirmative command or action by the Interstate Commerce Commission. On the contrary, by a long line of decisions, whereby applications to enforce orders of the Commission were considered and disposed of or where requests to restrain the enforcement of such orders were passed upon, it appears by the reasoning indulged in that it was never considered that there was power in the courts as an original question without previous affirmative action by the Commission to deal with what might be termed in a broad sense the administrative features of the act to regulate commerce by determining as an original question that there had been a compliance or noncompliance with the provisions of the act." 225 U. S. at p. 296. " . . . the recognition of a right in a court to assert the power now claimed would of necessity amount to a substitution of the court for the Commission or at all events would be to create a divided authority on a matter where from the beginning primary singleness of action

and unity was deemed to be imperative." 225 U. S. at p. 298.

¹⁵ See Chief Justice Taft's estimate of the services of Chief Justice White in "a new field of administrative law": "The capital importance which our railroad system has come to have in the welfare of this country made the judicial construction of the interstate commerce act of critical moment. It is not too much to say that Chief Justice White, in construing the measure and its great amendments has had more to do with placing this vital part of our practical government on a useful basis than any other judge. His opinions in the case of the Texas & P. R. Co. v. Abilene Cotton Oil Co. (1907) 204 U. S. 426, 51 L. ed. 553, 27 S. Ct. 350, 9 Ann. Cas. 1075) and the cases which followed it, are models of clear and satisfactory reasoning which gave to the people, to state legislatures, to Congress, and the courts a much-needed knowledge of the practical functions the Commerce Commission was to discharge, and of how they were to be reconciled to existing governmental machinery, for the vindication of the rights of the public in respect of national transportation. They are a conspicuous instance of his unusual and remarkable power and facility in statesmanlike interpretation of statute law." Proceedings on the Death of Chief Justice White, 257 U. S. v., xxv., 66 L. ed. 1084, 1091.

¹⁶ 34 Stat. at L. 584, Chap. 3591, 49 USCA § 1.

¹⁷ 36 Stat. at L. 539, Chap. 309.

¹⁸ Laws of New York, One Hundred and Thirtieth Session, Chap. 429 (1907).

¹⁹ Wisconsin Laws of 1907, Chap. 499, § 1797 m.

²⁰ See, e. g., Hughes, *Some Aspects of the Development of American Law* (1916) 39 N. Y. B. A. Rep. 266, 269, 270; Root, *Public Service by the Bar* (1916) 41 A. B. A. Rep.

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administrative agencies in enforcing legislative policies and called for accommodation of the duties entrusted to them to our traditional judicial system. This court "ascribed" to the findings of the Commission "the strength due to the judgments of a tribunal appointed by law and informed by experience." *Illinois C. R. Co. v. Interstate Commerce Commission* (1907) 206 U. S. 441, 454, 51 L. ed. 1128, 1133, 27 S. Ct. 700. Recognition of the Commission's expertise also led this court not to bind the Commission to common-law evidentiary and procedural fetters in enforcing basic procedural safeguards.²¹

From these general considerations the court evolved two specific doctrines limiting judicial review of orders of the Interstate Commerce Commission. One is the primary jurisdiction doctrine, firmly established in *Texas & P. R. Co. v. Abilene Cotton Oil Co.* (1907) 204 U. S. 426, 51 L. ed. 553, 27 S. Ct. 350, 9 Ann. Cas. 1075.

355, 368, 369; *Sutherland, Private Rights and Government Control* (1917) 42 A. B. A. 197.

²¹ *Interstate Commerce Commission v. Baird* (1904) 194 U. S. 25, 44, 48 L. ed. 860, 869, 24 S. Ct. 563; *Interstate Commerce Commission v. Louisville & N. R. Co.* (1913) 227 U. S. 88, 93, 57 L. ed. 431, 434, 33 S. Ct. 185; *United States v. Abilene & S. R. Co.* (1924) 265 U. S. 274, 288, 68 L. ed. 1016, 1022, 44 S. Ct. 565; compare *Douglas v. Noble* (1923) 261 U. S. 165, 169, 67 L. ed. 590, 593, 43 S. Ct. 303. "It is, perhaps, not too much to say that not a single case arising before the Commission could be properly decided if the complainant, the railroad, or the Commission were bound by the rules of evidence applying to the introduction of testimony in courts." Twenty-second Annual Report of the Interstate Commerce Commission, 10.

²² See also, e. g., *Baltimore & O. R. Co. v. United States ex rel. Pitcairn Coal Co.* (1910) 215 U. S. 481, 54 L. ed. 292, 30 S. Ct. 164; *Robinson v. Baltimore & O. R. Co.* (1912) 222 U. S. 506, 56 L. ed. 288, 32 S. Ct. 114; *United States v. Pacific & A. R. & Nav. Co.* (1913) 228 U. S. 87, 57 L. ed. 742, 33

Thereby matters which call for technical knowledge pertaining to transportation must first be passed upon by the Interstate Commerce Commission before a court can be invoked.²² The other is the doctrine of administrative finality. Even when resort to courts can be had to review a Commission's order, the range of issues open to review is narrow. Only questions affecting constitutional power, statutory authority, and the basic prerequisites of proof can be raised. If these legal tests are satisfied, the Commission's order becomes incontestable. *Interstate Commerce Commission v. Illinois C. R. Co.* (1910) 215 U. S. 452, 470, 54 L. ed. 280, 287, 30 S. Ct. 155; *Interstate Commerce Commission v. Union P. R. Co.* (1912) 222 U. S. 541, 56 L. ed. 308, 32 S. Ct. 108.

In translating these important objectives for effectuating the congressional scheme to enlarge the independent powers of the Interstate Commerce

S. Ct. 443; *Texas & P. R. Co. v. American Tie & Timber Co.* (1914) 234 U. S. 138, 58 L. ed. 1255, 34 S. Ct. 885; *Northern P. R. Co. v. Solum* (1918) 247 U. S. 477, 62 L. ed. 1221, 38 S. Ct. 550; *Director General v. Viscose Co.* (1921) 254 U. S. 498, 65 L. ed. 372, 41 S. Ct. 151; *Dayton-Goose Creek R. Co. v. United States* (1924) 263 U. S. 456, 68 L. ed. 388, 44 S. Ct. 169, 33 A.L.R. 472; *Western & A. R. Co. v. Georgia Pub. Service Commission*, 267 U. S. 493, 69 L. ed. 753, P.U.R.1925D, 100, 45 S. Ct. 409; *Midland Valley R. Co. v. Barkley* (1928) 276 U. S. 482, 72 L. ed. 664, 48 S. Ct. 342; *North Dakota R. Comrs. v. Great Northern R. Co.* 281 U. S. 412, 74 L. ed. 936, P.U.R.1930C, 225, 50 S. Ct. 391. The doctrine has been given general application, e. g., *United States Nav. Co. v. Cunard S. S. Co.* (1932) 284 U. S. 474, 76 L. ed. 408, 52 S. Ct. 247 (Shipping Board); *Myers v. Bethlehem Shipbuilding Corp.* (1938) 303 U. S. 41, 82 L. ed. 638, 58 S. Ct. 459 (National Labor Relations Board). Compare, also, *Prentiss v. Atlantic Coast Line Co.* (1908) 211 U. S. 210, 53 L. ed. 150, 29 S. Ct. 67; *Anniston Mfg. Co. v. Davis* (1937) 301 U. S. 337, 81 L. ed. 1143, 57 S. Ct. 816.

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Commission into a seemingly technical distinction between "negative" and "affirmative" orders, the opinion in *Procter & G. Co. v. United States* (1912) 225 U. S. 282, 56 L. ed. 1091, 32 S. Ct. 761, gave authority to a doctrine which harmonizes neither with the considerations which induced it nor with the course of decisions which have purported to follow it.²³ Subsequent cases have made it abundantly clear that "negative order" and "affirmative order" are not appropriate terms of art.²⁴ Thus, the court has had occasion to find that while an or-

der was "negative in form" it was "affirmative in substance."²⁵ "Negative" has really been an obfuscating adjective in that it implied a search for a distinction—nonaction as against action—which does not involve the real considerations on which rest, as we have seen, the reviewability of Commission orders within the framework of its discretionary authority and within the general criteria of justiciability.²⁶ "Negative" and "affirmative," in the context of these problems, is as unilluminating and mischievous as the distinction as the out-

²³ In *Manufacturers R. Co. v. United States* (1918) 246 U. S. 457, 62 L. ed. 831, 38 S. Ct. 383, the court treated as reviewable the action of the Commission in failing to require an absorption of switching charges or a requested joint rate but held not reviewable refusal to fix divisions. In part this may have been on the theory that the issue of the divisions was not properly before the Commission. See 246 U. S. at pp. 482, 483, 62 L. ed. 844, 845. In *United States v. New River Co.* (1924) 265 U. S. 533, 68 L. ed. 1165, 44 S. Ct. 610, the court held reviewable the action of the full Commission dismissing a complaint by a shipper against certain car practices held invalid by one division of the Commission. *Standard Oil Co. v. United States* (1931) 283 U. S. 235, 75 L. ed. 999, 51 S. Ct. 429, held not reviewable the action of the Commission refusing to grant reparations, but the main basis of the decision was not the "negative order" doctrine but the statutory scheme dealing with reparations. In *Alton R. Co. v. United States* (1932) 287 U. S. 229, 77 L. ed. 275, 53 S. Ct. 124, the court held reviewable the action of the Commission refusing to interfere with divisions set by a railroad in violation of a previous agreement, the court stating that the action of the Commission validated divisions which were previously invalid. See 287 U. S. at pp. 236, 237, 77 L. ed. 280, 281, 53 S. Ct. 124.

²⁴ The only test which can be derived from the cases in notes 11-13, 23, *supra*, is that an order is "affirmative" if it has the legal effect of changing the status quo, permitting what was previously not allowed or compelling what was previously not required. But on this test the order in the *Lehigh Valley Case* was "affirmative." The decision in the *New River Co. Case*, *supra*, could hardly be hung on such a gossamer thread as this test, since there the only change in the status quo resulting from an order considered "affirma-

tive" was that the order of the full Commission held unobjectionable a car practice which was the subject of complaint. A division of the Commission in the same proceeding had stated that the practice was invalid and should be abandoned and it was abandoned. After the full Commission found the practice not invalid and dismissed the complaint, the practice was adopted again.

²⁵ See *Alton R. Co. v. United States*, *supra*.

²⁶ This becomes clear on analysis of the precise problem presented in the *Procter & G. Co. Case*, *supra*. It was a dispute between shippers who owned private cars and those who did not as to the distribution of the cars owned by the carriers. The Commission was called upon to resolve that economic conflict by virtue of its authority to prevent practices which unfairly discriminated against one group at the expense of the other. Its final decision was based on a comprehensive policy concerning the place of private cars in our transportation system. Had the prior practice of the carriers been inconsistent with this policy, and the order of the Commission compelled a change, the private car shippers would admittedly have been entitled to test the validity of the Commission ruling in the courts, subject, of course, to the canons of administrative finality. It seems capricious that the fact that the Commission's order authorized the preservation of the status quo should block any review at all. The force of this reasoning is emphasized when it is realized what small factors may determine whether the status quo has been changed, e. g., a difference of views within the Commission, as in the *New River Co. Case*, *supra*, note 24. See the opinion of the commerce court sustaining reviewability in *Procter & G. Co. v. United States* (1911) 188 Fed. 221.

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moded line between "nonfeasance" and "misfeasance."²⁷

The considerations of policy for which the notions of "negative" and "affirmative" orders were introduced, are completely satisfied by proper application of the combined doctrines of primary jurisdiction and administrative finality. The concept of "negative orders" has not served to clarify the relations between administrative bodies and the courts but has rather tended to obscure them. An action before the Interstate Commerce Commission is akin to an inclusive equity suit in which all relevant claims are adjusted.²⁸ An order of the Commission dismissing a complaint on the merits and maintaining the status quo is an exercise of administrative function, no more and no less, than an order directing some change in status. The nature of the issues foreclosed by the Commission's action and the nature of the issues left open, so far as the reviewing power of courts is concerned, are the same. Refusal to change an existing situation may, of course, itself be a factor in the Commission's allowable exercise of discretion. In the application of relevant canons of judicial review an order of the Com-

mission directing the adoption of a practice might raise considerations absent from a situation where the Commission merely allowed such a practice to continue. But this bears on the disposition of a case and should not control jurisdiction. The nature of judicial relief, that is the form of directions available, in situations like those presented by the Procter & G. Co. and the Lehigh Valley R. Co. Cases, *supra*, were the Commission's orders reviewed, would be no different than was that used in the Intermountain Rate and the New River Co. Cases, *supra*.²⁹ In both types of situations "a judgment rendered will be a final and indisputable basis of action as between the Commission and the defendant," *Interstate Commerce Commission v. Baird* (1904) 194 U. S. 25, 38, 48 L. ed. 860, 866, 24 S. Ct. 563. We conclude, therefore, that any distinction, as such, between "negative" and "affirmative" orders, as a touchstone of jurisdiction to review the Commission's orders, serves no useful purpose, and in so far as earlier decisions have been controlled by this distinction, they can no longer be guiding.

The order of the Communications

against it be adjudged invalid, that the carriers be enjoined from complying with the rule and that the Commission be enjoined from restricting the commerce of the complainants by its order and by the rule.

In the Lehigh Valley R. Co. Case, *supra*, the judicial relief asked was that the enforcement of the order of the Commission and the institution of any proceedings thereunder against the complainant be enjoined. In the Intermountain Rate Cases ([1914] 234 U. S. 476, 58 L. ed. 1408, 34 S. Ct. 986) the judicial relief asked was that the order of the Commission be set aside, and § 4 of the Act to Regulate Commerce and be declared invalid, and that the Commission and the attorney general be enjoined from taking any proceedings to prosecute the carriers for violation of § 4.

²⁷ The Restatement of Torts does not employ this nomenclature. See, also, 7 Labatt, Master & Servant, § 2586.

²⁸ Compare *Inland Steel Co. v. United States* (1939) — U. S. —, 83 L. ed. —, 59 S. Ct. 415, 418; "the Commission was acting in the interest of shippers generally and in behalf of the public and the national railroad systems."

²⁹ In the Procter & G. Co. Case, *supra*, the judicial relief asked was that the order of the Commission dismissing the complaint against the demurrage rules be annulled and that the carriers be enjoined from applying those rules. In the New River Co. Case, *supra*, the judicial relief asked was that the car rule under attack be adjudged invalid, that the order of the Commission dismissing the complaint

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Commission in this case was therefore reviewable. It was not a mere abstract declaration regarding the status of the Rochester under the Communications Act,³⁰ nor was it a stage in an incomplete process of administrative adjudication. The contested order determining the status of the Rochester necessarily and immediately carried direction of obedience to previously formulated mandatory orders addressed generally to all carriers amenable to the Commission's authority. Into this class of carriers the order under dispute covered the Rochester, and by that fact, in conjunction with the other orders, made determination of the status of the Rochester a reviewable order of the Commission.

[3-5] But while the Rochester had a right to challenge the order, it cannot prevail on the merits.

The ultimate legal issue is the validity of the Commission's finding that the Rochester "is under the control of the New York Telephone Company." The justification for this finding clearly emerges from a rapid summary of the governing facts adduced before the Commission concerning the relationship between the New York and the Rochester.

Prior to 1920 an independent telephone company and the New York (which was part of the Bell system) were competitors in Rochester. As part of an endeavor to meet an arrangement which the Bell system had, in 1913, made with the Department of Justice, the details of which need not here be recited, the Rochester was formed to consolidate the two previously competing enterprises. The

property of the independent was paid for by bonds of the Rochester, and the property of the New York by preferred stock, later designated as second preferred, of which the New York had the entire issue, 48,140 shares at \$100 par. The Rochester issued 1,000 shares of common stock, at \$100 par, of which the New York purchased 335 shares. The New York also paid the officers of the independent company \$70,000 for their services in consummating the consolidation, but \$66,500 of this amount was to be used in purchasing the remaining 665 shares of common stock for a deposit in a voting trust. Other outstanding securities of the Rochester, first preferred stock and bonds, neither of which had any voting rights, were held by the public. There were complicated limitations upon the voting rights of the second preferred stockholders, but the dominating circumstances touching voting rights were that in major matters no vote of stockholders could be effective unless concurred in by 80 per cent of the common stock and that the executive committee and the board of directors were elected by cumulative voting of the common stock, thereby assuring New York five out of fifteen members of the board of directors and two members in an executive committee of five.

Putting all these factors in the context of the circumstances under which the Rochester came into being, the manner in which it was financed, the operation of the voting trust, and the stake of the New York in the Rochester, the Commission, after full hearing and due consideration, concluded that "the New York Company, through stock ownership, is the dominant fi-

³⁰ Compare *United States v. Atlanta, B. & C. R. Co.* (1931) 282 U. S. 522, 75 L. ed. 513, 51 S. Ct. 237.

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financial factor in the respondent company and also, that this, taken together with their contractual arrangements and other pertinent facts and circumstances appearing in the record, unquestionably gives the New York Company power to control the functions of the Rochester Telephone Corporation."

The record amply justified the Communications Commission in making such findings. Investing the Commission with the duty of ascertaining "control" of one company by another, Congress did not imply artificial tests of control.³¹ This is an issue of fact to be determined by the special circumstances of each case. So long as there is warrant in the record for the judgment of the expert body it must stand. The suggestion that the refusal to regard the New York ownership of only one third of the common stock of the Rochester as conclusive of the former's lack of control of the latter should invalidate the Commission's finding, disregards actualities in such intercorporate relations. Having found that the record permitted the Commission to draw the conclusion that it did, a court travels beyond its province to express concurrence therewith as an original question. "The judicial function is exhausted when there is found to be a rational basis for the conclusions approved by the administrative body." *Mississippi Valley Barge Line Co. v. United States* (1934) 292 U. S. 282, 286, 78 L. ed. 1260, 1264, 4 P.U.R.(N.S.) 211, 54 S. Ct. 692; *Swayne & Hoyt v. United States* (1937) 300 U. S. 297,

303 et seq., 81 L. ed. 659, 664, 57 S. Ct. 478.

Decree affirmed.

Mr. Justice McReynolds concurs in the result.

BUTLER, J.: Appellant's complaint shows that prior to making its final order November 18, 1936, the Commission made general orders 1, 2, 3, 5, 6a, and 9, directing that every telephone carrier subject to the act file statements concerning its business and affairs. Declining to recognize the act as applying to it, appellant withheld compliance. The Commission ordered it to obey or to file answer setting forth the facts on which it relied as justification for failure so to do. Appellant then applied to the Commission for determination that it is not subject to the act or the Commission's jurisdiction because exempted under § 2(b) (2). After hearing, the Commission made the final order declaring appellant subject to all common carrier provisions of the act "and, therefore, subject to all orders of the telephone division applicable to wire telephone carriers. . . ." Thus plainly it made the general orders above mentioned applicable to appellant.

The complaint challenged the validity of these orders on the ground inter alia that appellant as a matter of law is, and by the evidence and facts found by the Commission is shown to be, not subject to any of them. The prayer is for decree "setting aside and annulling said orders . . . and each and all of them and enjoining the enforcement of" them. In the district court, appellees raised no question as to its jurisdiction. But here they argue: The Commission's determination clas-

³¹ See House Report 1850, 73d Cong., 2d Sess., 4-5; compare 78 Cong. Rec. 8446.

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sifying the appellant as subject to its jurisdiction and to the general orders is not an order reviewable under the terms of the Urgent Deficiencies Act of 1913; the determination neither commands nor directs appellant to do or refrain from doing anything; the Commission could not have instituted a proceeding to enforce it and consequently the court has no jurisdiction to set it aside.

The final order is much more than a mere determination that appellant is subject to the act. When read, as it must be, in connection with the general orders, it unmistakably puts appellant under a series of affirmative mandates which, if valid, may be enforced under the act. See 47 USCA §§ 401, 409, 501, 502; 28 USCA § 47 made applicable by 47 USCA § 402a. These unequivocally impose upon appellant burden and expense of preparing and reporting to the Com-

mission a vast amount of statistics and other information.

The case presents no debatable question as to the jurisdiction of the district court. A statement of the facts alleged conclusively shows that in purpose, terms, and effect the final order constitutes not mere determination of declaration but affirmative command. There is no occasion to review earlier decisions dealing with affirmative and negative administrative orders and obviously none to overrule any of them or to repudiate or impair the doctrine they establish.³² The court's discussion, extraneous to the issue involved, confuses rather than clarifies.

The findings of the district court are amply sustained by the evidence and its decree should be affirmed.

Mr. Justice McReynolds concurs in this opinion.

³² See e. g.: *Procter & G. Co. v. United States* (1912) 225 U. S. 282, 292 et seq., 56 L. ed. 1091, 1095, 32 S. Ct. 761; *Hooker v. Knapp* (1912) 225 U. S. 302, 56 L. ed. 1099, 32 S. Ct. 769; *United States v. Baltimore & O. R. Co.* (1912) 225 U. S. 306, 320, 56 L. ed. 1100, 1104, 32 S. Ct. 817; *Lehigh Valley R. Co. v. United States* (1917) 243 U. S. 412, 61 L. ed. 819, 37 S. Ct. 397; *United States v. Illinois C. R. Co.* (1917) 244 U. S. 82, 89, 61 L. ed. 1007, 1010, 37 S. Ct. 584; *Chicago Junction Case (Baltimore & O. R. Co. v. United States)* [1924] 264 U. S. 258, 263, 68 L. ed. 667, 673, 44 S. Ct. 317; *United States v. New River Co.* (1924) 265 U. S. 533, 539, 68 L. ed. 1165, 1171, 44 S. Ct. 610; *Delaware & H. Co. v. United States*, 266 U. S. 438, 448, 69 L. ed. 369, 371, P.U.R. 1925C, 394, 45 S. Ct. 153; *Minneapolis & St. L. R. Co. v. Peoria & P. U. R. Co.* (1926) 270 U. S. 580, 70 L. ed. 743, 46 S. Ct. 402; *Colorado v. United States* (1926) 271 U. S. 153, 161, 70 L. ed. 878, 882, 46

S. Ct. 452; *United States v. Los Angeles & S. L. R. Co.* 273 U. S. 299, 309, 71 L. ed. 651, 655, P.U.R.1927B, 357, 47 S. Ct. 413; *Great Northern R. Co. v. United States* (1928) 277 U. S. 172, 72 L. ed. 838, 48 S. Ct. 466; *Piedmont & N. R. Co. v. United States* (1930) 280 U. S. 469, 475-477, 74 L. ed. 551, 554-556, 50 S. Ct. 192; *United States v. Atlanta, B. & C. R. Co.* (1931) 282 U. S. 522, 75 L. ed. 513, 51 S. Ct. 237; *Standard Oil Co. v. United States* (1931) 283 U. S. 235, 75 L. ed. 999, 51 S. Ct. 429; *Alton R. Co. v. United States* (1932) 287 U. S. 229, 77 L. ed. 275, 53 S. Ct. 124; *United States v. Baltimore & O. R. Co.* (1935) 293 U. S. 454, 79 L. ed. 587, 55 S. Ct. 268; *Powell v. United States* (1937) 300 U. S. 276, 284, 81 L. ed. 643, 649, 57 S. Ct. 470; *United States v. Griffin* (1938) 303 U. S. 226, 232 et seq., 82 L. ed. 764, 768, 58 S. Ct. 601; *Shannahan v. United States* (1938) 303 U. S. 596, 599, 82 L. ed. 1039, 1041, 58 S. Ct. 732.

Federal Power Commission

v.

Pacific Power & Light Company et al.

[No. 508.]

(— U. S. —, 83 L. ed. —, 59 S. Ct. 766.)

Appeal and review, § 8 — Orders reviewable — Disapproval of property transfer.

1. An order of the Federal Power Commission denying an application by power companies for approval of a proposed transfer of property is reviewable under § 313(b) of the Federal Power Act, p. 93.

Appeal and review, § 8 — Orders reviewable — Existence of "controversy."

2. The fact that a reviewing court cannot itself lift a statutory prohibition by granting permission for a property transfer, or order the Commission to grant such permission, does not prevent the existence of a "case" or "controversy" subject to judicial review, when a Commission order denying authority for a property transfer is attacked; for purposes of judicial finality it is not assumed that a Commission will disregard the direction of a reviewing court, p. 93.

[April 17, 1939.]

CERTIORARI to Circuit Court of Appeals for the Ninth Circuit to review decision of court denying motion to dismiss for lack of jurisdiction a petition for review of an order of the Federal Power Commission which denied permission to transfer public utility property; affirmed. For lower court decision see 98 F. (2d) 835, 25 P.U.R.(N.S.) 458.

APPEARANCES: Assistant Solicitor General Bell, of Washington, D. C., argued the cause for petitioner; A. J. G. Priest, of New York city, and John A. Laing, of Portland, Oregon, argued the cause for respondents.

Mr. Justice FRANKFURTER delivered the opinion of the court: The case is here on certiorari to the circuit court of appeals for the ninth circuit, granted because of the intrinsic

importance of the issue raised and of a conflict between the decision below (1938) 98 F. (2d) 835, 25 P.U.R.(N.S.) 458, and that of the circuit court of appeals for the second circuit. Newport Electric Corp. v. Federal Power Commission (1938) 97 F. (2d) 580, 25 P.U.R.(N.S.) 40.

[1,2] The sole issue before us is whether an order of the Federal Power Commission, denying an application under § 203(a), 16 USCA

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§ 824b¹ of the Federal Power Act as amended, is reviewable under § 313 (b), 16 USCA § 825l (b) of that act.

The Inland Power & Light Company, an Oregon corporation, owns three hydroelectric projects in Oregon and Washington, two of which are operated under license of the Federal Power Commission, and the third, under a permit issued by the Secretary of the Interior. The Pacific Power & Light Company, a Maine corporation, is engaged in generating and distributing electric energy in Washington and Oregon, and owns and operates facilities for interstate transmission of electricity. The Inland and Pacific Companies filed a joint application with the Power Commission for approval, under §§ 8 and 203 of the act, of a proposed transfer of all the assets, including licenses, of Inland to Pacific, and of the termination of Inland's existence. Having found after due hearing and consideration that "applicants have failed to establish that said transfer will be consistent with the public interest within the contemplation of § 203(a) of the Federal Power Act," the Commission ordered that "the application be and the same hereby is denied."

Invoking § 313(b) of the Federal Power Act, the applicants initiated the present proceedings in the circuit court of appeals for the ninth circuit to review the order of the Commission as unwarranted in law and un-

supported in its findings. The exact scope of the prayer is postponed for later consideration. The Power Commission challenged the jurisdiction of the circuit court of appeals by a motion to dismiss the petition on the ground that the court was without jurisdiction under § 313(b), since the order sought to be set aside was negative in character. The denial of that motion brought the case here.

If the Federal Power Act had formally taken over the statutory provisions of the Urgent Deficiencies Act pertaining to review of orders of the Interstate Commerce Commission, the decision in *Rochester Teleph. Corp. v. United States* (1939) — U. S. —, 83 L. ed. —, 28 P.U.R.(N.S.) 78, *ante*, 59 S. Ct. 754, would dispose of this case and sustain the assumption of jurisdiction below. But the Power Act contains a distinctive formulation of the conditions under which resort to the courts may be made and Congress determines the scope of jurisdiction of the lower Federal courts. Section 313(b) provides that "Any party to a proceeding under this act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States." (16 USCA § 825l.) The denial by the Commission of approval of the application by petitioners of the transfer of Inland to Pacific as not "consistent with the public interest" was an "order," and the petitioners

¹ "No public utility shall sell, lease, or otherwise dispose of the whole of its facilities subject to the jurisdiction of the Commission, or any part thereof of a value in excess of \$50,000, or by any means whatsoever, directly or indirectly, merge or consolidate such facilities or any part thereof with those of any other person, or purchase, acquire, or

take any security of any other public utility, without first having secured an order of the Commission authorizing it to do so. . . . After notice and opportunity for hearing, if the Commission finds that the proposed disposition, consolidation, acquisition, or control will be consistent with the public interest, it shall approve the same."

FEDERAL POWER COMMISSION v. PACIFIC POWER & LIGHT CO.

were "aggrieved" by it since without such approval the transfer was forbidden. Section 203(a). Thus the statutory scheme of the Power Act only reinforces the analysis made in the Rochester Teleph. Corp. Case, *supra*.

But it is urged that review of the Power Commission's order does not present a "case" or "controversy," because the court itself cannot lift the prohibition of the statute by granting permission for the transfer, nor order the Commission to grant such permission. And so it is claimed that any action of a court in setting aside the order of the Commission would be an empty gesture, since without permission a transfer would be unlawful. But this proves too much. In none of the situations in which an action of the Interstate Commerce Commission or of a similar Federal regulatory body comes for scrutiny before a Federal court can judicial action supplant the discretionary authority of a Commission. A Federal court cannot fix rates

nor make divisions of joint rates nor relieve from the long-short haul clause nor formulate car practices. So here it is immaterial that the court itself cannot approve or disapprove the transfer. The court has power to pass judgment upon challenged principles of law in so far as they are relevant to the disposition made by the Commission. ". . . a judgment rendered will be a final and indisputable basis of action as between the Commission and the defendant." *Interstate Commerce Commission v. Baird* (1904) 194 U. S. 25, 38, 48 L. ed. 860, 866, 24 S. Ct. 563. In making such a judgment the court does not intrude upon the province of the Commission, while the constitutional requirements of "case" or "controversy" are satisfied. For purposes of judicial finality there is no more reason for assuming that a Commission will disregard the direction of a reviewing court than that a lower court will do so.

Affirmed.

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United States et al.

v.

Dan E. Maher, Doing Business As
Interstate Busses

[No. 432.]

(— U. S. —, 83 L. ed. —, 59 S. Ct. 768.)

Appeal and review, § 8 — Orders reviewable — Denial of certificate.

1. An order of the Interstate Commerce Commission denying a certificate

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for motor carrier operation, claimed under the "grandfather clause" of the Motor Carrier Act on the basis of prior operation, is reviewable, p. 96.

Certificates of convenience and necessity, § 62 — Exemption under "grandfather clause" — Extent of prior operations.

2. An application by a motor carrier under the "grandfather clause" of the Motor Carrier Act for a certificate to engage in transportation over a specified highway between designated points and intermediate points is properly rejected upon findings that the applicant, prior to the statutory date governing prescriptive rights, had been engaged in quite different services from those for which it asked a certificate, namely, an irregular so-called anywhere-for-hire operation over any route adapted to a particular trip but using at least for part of the distance the designated highway, p. 96.

Certificates of convenience and necessity, § 159 — Scope of proceeding — Limitation to pleading.

3. The Interstate Commerce Commission, upon rejecting an application for operating authority based on prescriptive rights under the "grandfather clause" of the Motor Carrier Act, is not required to canvass all the questions of public and private interest that are implicit in an application for a certificate based on "public convenience and necessity" so as to decide the application on the basis of convenience and necessity when the applicant himself only seeks the favor of the "grandfather clause" and makes no claim to have the Commission act outside that clause, p. 100.

[April 17, 1939.]

APPPEAL from decree granted to District Court of three judges setting aside order of Interstate Commerce Commission which rejected an application for a certificate of convenience and necessity under the "grandfather clause" of the Motor Carrier Act; reversed. For lower court decision see 23 F. Supp. 810.

APPEARANCES: Hugh B. Cox, of Washington, D. C., argued the cause for appellants; William L. Harrison, of Portland, Oregon, argued the cause for appellee.

Mr. Justice FRANKFURTER delivered the opinion of the court: The case is here on appeal, under § 238 of the Judicial Code as amended (28 USCA § 345), to review a final decree, setting aside an order of the Interstate Commerce Commission, granted by a district court of three

judges under the Motor Carrier Act, 1935 (49 USCA Supp. § 305(h)), in connection with the Urgent Deficiencies Act of October 22, 1913 (28 USCA §§ 45, 47a).

[1, 2] The application to the special facts of this case of what is colloquially known as "the grandfather clause" of the Motor Carrier Act is the substantive question at issue. There is a preliminary jurisdictional problem touching those phases of the relations of the Interstate Commerce Commission to the courts which are implied

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the claim that the Commission had issued a "negative order."

Section 206 of the Motor Carrier Act, Act of August 9, 1935, 49 Stat. L. 543, Chap. 498, 49 USCA § 306, forbids common carriers by motor vehicle subject to its provisions from engaging in interstate operations without a certificate of public convenience and necessity to be issued by the Interstate Commerce Commission under § 207 of the Act, 49 USCA § 307. The grandfather clause" of § 206, however, provides that "if any such carrier . . . was in bona fide operation as a common carrier by motor vehicle on June 1, 1935, over the route or routes or within the territory for which application is made and has so operated since that time, . . . the Commission shall issue such certificate without requiring further proof that public convenience and necessity will be served by such operation."

On January 24, 1936, the appellee, Maher, filed an application under the grandfather clause" for a certificate to engage in the transportation of passengers and baggage over U. S. Highway No. 99 between Portland and Seattle and intermediate points. After a hearing was had before a "Joint Board" composed of members from the states involved (§§ 203(a) (9) and 205, 49 USCA §§ 303(a) (9), and 305) at which competing carriers and the Public Utilities Commission of Oregon appeared in opposition to the application, and after a report was filed by the Joint Board with the Interstate Commerce Commission recommending that the application be denied, the Interstate Commerce Commission, Division 5, on October 27, 1937, found the facts to be as follows:

From 1931 until May 29, 1936, the appellee had engaged in bona fide "anywhere-for-hire" operations in Oregon with occasional entries into Washington. There were rare trips to Seattle, no service at all to most of the intervening points, and no showing that passengers were transported on return trips to Portland. On May 29, 1936, the appellee began his regular-route service between Portland and Seattle which he conducted regularly since that time. But upon the institution of the regular-route service between Portland and Seattle the appellee discontinued the "anywhere-for-hire" operations theretofore conducted. Upon this showing Division 5 found that the service conducted by the appellee since May 29, 1936, was a different service from that conducted by him prior to that time, and therefore concluded that he did not come within "the grandfather clause." And so, the Commission denied Maher's application and ordered him "to cease and desist" from "all operations" as a common carrier in interstate commerce. Thereupon the appellee filed the present suit in the district court for the district of Oregon against the United States and the Interstate Commerce Commission, praying that the Commission's order be set aside and "any construction thereunder" enjoined. The suit was disposed of on the pleadings, the answer of the Commission having incorporated its report and orders. A majority of the district court entertained jurisdiction and held that the appellee was entitled to an "anywhere-for-hire" permit under "the grandfather clause" as well as the regular-route permit under § 207. 23 F. Supp. 810. Circuit Judge Ha-

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ney found jurisdiction to review the cease and desist order, although not the order denying the certificate of convenience and necessity, but sustained the Commission's view of the act.

The jurisdictional problem presents another instance of the Interstate Commerce Commission having been invested with power to free a complainant of restrictions placed upon his conduct by a statutory scheme and having definitively rejected the claim for dispensation. The applicant before the Commission then came into court to "set aside" and "annul" the "order" of the Interstate Commerce Commission, claiming that the Com-

mission's action was based on a wrong reading of the authority which the Act of Congress gave it. To the hearing of such a claim there is no jurisdictional barrier, as we have held today in *Rochester Teleph. Corp. v. United States* (1939) — U. S. —, 83 L. ed. —, 28 P.U.R.(N.S.) 78, *ante*, 59 S. Ct. 754.¹

On the merits the case brings into question the validity of the construction placed by the Interstate Commerce Commission upon § 206(a) of the Motor Carrier Act relieving carriers operating on June 1, 1935, under the circumstances defined by the terms of § 206(a) from the requirements of § 207.² The latter section requires a

¹For reasons on which its legislative history appears to shed no light, the phrase "negative order" crept into § 205 of the Motor Carrier Act in a context not covering the present situation.

²"Section 206. (a) . . . no common carrier by motor vehicle subject to the provisions of this part shall engage in any interstate or foreign operation on any public highway, or within any reservation under the exclusive jurisdiction of the United States, unless there is in force with respect to such carrier a certificate of public convenience and necessity issued by the Commission authorizing such operations: *Provided, however*, That, subject to § 210 [49 USCA § 310], if any such carrier or predecessor in interest was in bona fide operation as a common carrier by motor vehicle on June 1, 1935, over the route or routes or within the territory for which application is made and has so operated since that time, or if engaged in furnishing seasonal service only, was in bona fide operation on June 1, 1935, during the season ordinarily covered by its operation, except in either instance as to interruptions of service over which the applicant or its predecessor, in interest had no control, the Commission shall issue such certificate without requiring further proof that public convenience and necessity will be served by such operation, and without further proceedings, if application for such certificate is made to the Commission as provided in paragraph (b) of this section and within one hundred and twenty days after this section shall take effect, and if such carrier was registered on June 1, 1935, under any code of fair competition requiring registration, the fact of registration shall be evidence of bona fide operation to be con-

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considered in connection with the issuance of such certificate. Otherwise the application for such certificate shall be decided in accordance with the procedure provided for in § 207 (a) of this part and such certificate shall be issued or denied accordingly. Pending the determination of any such application the continuance of such operation shall be lawful: *And provided further*, That this paragraph shall not be so construed as to require any such carrier lawfully engaged in operation solely within any state to obtain from the Commission a certificate authorizing the transportation by such carrier of passengers or property in interstate or foreign commerce between places within such state if there be a board in such state having authority to grant or approve such certificates and if such carrier has obtained such certificate from such board. Such transportation shall, however, be otherwise subject to the jurisdiction of the Commission under this part.

"(b) Application for certificates shall be made in writing to the Commission, be verified under oath, and shall be in such form and contain such information and be accompanied by proof of service upon such interested parties as the Commission shall, by regulation, require. Any person, not included within the provisions of paragraph (a) of this section, who or which is engaged in transportation in interstate or foreign commerce as a common carrier by motor vehicle when this section takes effect may continue such operation for a period of one hundred and twenty days thereafter without a certificate and, if application for such certificate is made to the Commission within such period, the carrier may, under such regulations as the Commission shall prescribe, continue such op-

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finding by the Commission that the granting of such a certificate is demanded by public convenience and necessity. But under § 206(a) the Commission must issue "such certificate without requiring further proof that public convenience and necessity will be served" by an applicant who "was in bona fide operation as a common carrier by motor vehicle on June 1, 1935, over the route or routes or within the territory for which application is made and has so operated since that time." By this legislation Congress responded to the felt need for regulating interstate motor transportation through familiar administrative devices, while at the same time it satisfied the dictates of fairness by affording sanction for enterprises theretofore established. Whether an applicant seeking exemption had in fact been in operation within the immunizing period of the statute was bound to raise controverted matters of fact. Their determination Congress entrusted to the Commission. The legal issues presented by this record are relatively simple once the somewhat confused operations of the appellee's business are clearly defined.

Invoking the "grandfather clause" the appellee sought from the Commission a certificate authorizing continuance of his regular service between the fixed termini of Portland and Se-

attle on U. S. Highway 99. But the Commission found that the regular operation over this route had only been instituted on May 29, 1936. Therefore, and including the crucial period prior to June 1, 1935, the appellee had been engaged in quite different services from those for which it asked a certificate, namely, "an irregular, so-called anywhere-for-hire operation in Oregon with occasional trips to points in Washington" over any route adapted to a particular trip, but using at least for part of the distance U. S. Highway 99 on trips to Washington. These irregular operations were discontinued after the appellee's regular route was established. Applying these findings which are binding here, the Commission ruled that the appellee did not bring himself within the privilege of the "grandfather clause." In making this application of the statute, the Commission properly construed it.

The recognized practices of an industry give life to the dead words of a statute dealing with it. In differentiating between operations over the "route or routes" for which an application under the "grandfather clause" is made as against operations "within the territory," Congress plainly adopted the familiar distinction between "anywhere-for-hire" bus operations over irregular routes and regular-route bus operations between fixed termini.³

is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied: *Provided, however*, That no such certificate shall be issued to any common carrier of passengers by motor vehicle for operations over other than a regular route or routes, and between fixed termini, except as such carriers may be authorized to engage in special or charter operations." (49 USCA § 307.)

³ See *Re Motor Bus and Motor Truck Operation* (1928) 140 Inters. Com. Rep. 685, 699; *Re Coordination of Motor Transporta-*

operation until otherwise ordered by the Commission." (49 USCA § 306.)

"Section 207. (a) Subject to § 210, a certificate shall be issued to any qualified applicant therefor, authorizing the whole or any part of the operations covered by the application, if it is found that the applicant is fit, willing, and able properly to perform the service proposed and to conform to the provisions of this part and the requirements, rules, and regulations of the Commission thereunder, and that the proposed service, to the extent to be authorized by the certificate,

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Such recognition is implicit also in the provision of § 208(a), 49 USCA § 308(a) that "Any certificate issued under §§ 206 or 207 shall specify the service to be rendered and the routes over which, the fixed termini, if any, between which, and the intermediate and off-route points, if any, at which, and in case of operations not over specified routes or between fixed termini, the territory within which, the motor carrier is authorized to operate." Since the new regular route of appellee was not in existence on June 1, 1935, and the irregular "anywhere-for-hire" service was not "so operated," as required by § 206, when the Commission passed upon the application for a "grandfather" certificate, the Commission rightly rejected the application.

[3] But the district court set aside the Commission's order on another

ground. It held that when the Commission rejected appellee's claim under the "grandfather clause" another provision of § 206(a) sprang into relevance, to wit "Otherwise the application for such certificate shall be decided in accordance with the procedure provided for in § 207(a) of this part and such certificate shall be issued or denied accordingly." We do not read the statute as laying a compulsion upon the Commission to canvass all the questions of public and private interest that are implicit in an application for a certificate based on "public convenience and necessity" when the applicant himself only seeks the favor of the "grandfather clause" and makes no claim, either before the Commission or in his bill seeking to enjoin its action, to have the Commission act outside the "grandfather clause."

Reversed.

tion (1932) 182 Inters. Com. Rep. 263, 274. See also *Coördination of Motor Transportation*, Sen. Doc. No. 43, 72d Cong., 1st Sess.,

pp. 34, 35; *Regulation of Transportation Agencies*, Sen. Doc. No. 152, 73d Cong., 2d Sess., pp. 176, 191, 192.

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People's Gas Light & Coke Company et al.

v.

James M. Slattery et al.

[No. 24836.]

(— Ill. —, — N. E. (2d) —.)

Injunction, § 11 — Exhaustion of administrative remedies.

1. A suitor must exhaust his administrative remedies before seeking the extraordinary relief of a court of equity, in order that the administrative body may have an opportunity to correct its errors and thus do away with the necessity for a resort to the courts, p. 108.

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Injunction, § 13 — Exhaustion of remedies — Commission proceeding — Application for rehearing.

2. Resort by a public utility company to the courts for an injunction to restrain the enforcement of Commission rate orders is premature when the utility company has not done all it can do under the regulatory statute to get relief by applying to the Commission for a rehearing and by applying to the Commission to establish reasonable rates, p. 108.

Injunction, § 16 — Absence of legal remedy.

3. The aid of equity can be invoked only in the absence of an adequate legal remedy, p. 113.

Appeal and review, § 2 — Due process of law — Incurring of penalties.

4. Due process of law is afforded if resort may be had to the courts to review orders of the Commission without the risk of incurring penalties so heavy that a utility company would yield to a void order rather than risk the punishment that might be imposed if rates fixed by the Commission order should later be declared to be valid, p. 113.

Appeal and review, § 5 — Due process of law — Forbidding suspending order — Rate case.

5. The right to an appeal or writ of error does not require that the same shall be made a supersedeas, and there is nothing unreasonable in forbidding a suspending order where a rate has been in effect for a year or more, where the Commission reinstates such rate, when all this must be done after a full hearing and the remedy of appeal provided may be just as speedy as the remedy of injunction, p. 113.

Appeal and review, § 4 — Constitutional requirements — Equity jurisdiction of court.

6. Section 68 of the Public Utilities Act, providing for appeals from Commission orders and depriving equity courts of original jurisdiction to restrain the enforcement of a Commission rate order, is not in violation of § 12 of Art. 6 of the state Constitution conferring original equity jurisdiction upon the circuit court, since the constitutional provision was not intended to prevent the legislature from providing adequate and exclusive legal remedies, p. 115.

(STONE and JONES, JJ., dissent.)

[February 22, 1939.]

APPPEAL from decree of Circuit Court enjoining Commission and attorney general from enforcing a certain schedule of gas rates and from applying or enforcing a Commission order denying another schedule of rates, and also enjoining them from enforcing penalties or other remedies for proceeding in disregard of such rate schedules or order of the Commission; decree reversed. See 19 P.U.R.(N.S.) 177.

APPEARANCES: Cooke, Sullivan & Ricks and Wilson & McIlvaine, Attorneys for appellee, George A. Cooke, Francis L. Daily, Edward H. Fiedler, John M. Connery, James T. Mullaney, and Joseph R. Gray, of counsel; Otto Kerner, Attorney General of the state of Illinois, and Barnet Hodes,

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Corporation Counsel, city of Chicago, Attorneys for appellants, Montgomery S. Winning, Harry R. Booth, W. Robert Ming, Jr., Thomas A. Keegan, John P. Barnes, Jr., Frederick Zazove, and William F. Schulz, Jr., Assistants Attorney General, of counsel.

FARTHING, J., delivered the opinion of the court: The circuit court of Cook county rendered the decree in this cause, February 4, 1938. It contained a finding that "§ 68 of the Public Utilities Act, in so far as, and to the extent that, it denies to the equity courts of this state the power to grant injunctive relief under the circumstances here presented, is unconstitutional, null, and void, in that it precludes plaintiff from having a prompt and effective judicial remedy against administrative action by the Commission and thereby denies to plaintiff the equal protection of the laws and takes the property of plaintiff without due process of law, in violation of the provisions of the Fourteenth Amendment to the Constitution of the United States, and of § 2 of Art. 2 of the Constitution of the state of Illinois; in that it precludes plaintiff from having a remedy which is certain and is available without delay, as guaranteed by § 19 of Art. 2 of the Constitution of the state of Illinois; and in that it denies to this court the exercise of its original jurisdiction in equity, in violation of § 12 of Art. 6 of the Constitution of the state of Illinois."

The members of the Illinois Commerce Commission and the attorney general were restrained from enforcing against the company, "Schedule of Rates Ill. C. C. No. 17," and from

applying or enforcing the order entered by the Illinois Commerce Commission May 21, 1937 (19 P.U.R. (N.S.) 177) which denied the company's "Schedule of Rates No. 19." They were also enjoined from enforcing against the company any penalties or other remedies for proceeding in disregard of "Schedule of Rates No. 17" or of the May 21, 1937, order of the Commission. If an appeal was perfected within ninety days the company was ordered to deposit by the tenth of each month in the American National Bank and Trust Company of Chicago, "the difference between the rates set forth in said 'Schedule of Rates Ill. C. C. No. 17' and the rates collected in the preceding calendar month by plaintiff from its customers for gas sold in the city of Chicago in excess of the rates set forth in said Schedule of Rates Ill. C. C. No. 17." This appeal followed.

The company asked and obtained approval of schedule of rates number 17 by an order entered April 15, 1934, and those rates were in effect when the decree appealed from was rendered. The "Public Utility Tax Act" became effective July 1, 1935, and on July 16, 1935, the company filed with the Commission its schedule of rates No. 18 which proposed a flat 3 per cent increase in rates, to cover the amount of the tax. The Commission suspended Schedule No. 18 on August 7, 1935, and on June 12, 1936, denied the proposed increase.

The company filed schedule No. 19 on June 26, 1936. If approved, the rates in Schedule No. 19 would result in an annual increase in the company's gross revenue estimated at approximately \$3,000,000. July 1, 1936, the

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Commission suspended this schedule. On July 24, 1936, while the hearing on it was in progress, the company filed a petition to put Schedule No. 19 into immediate effect. On August 26, 1936, this petition was denied and on May 21, 1937, *supra*, the Commission denied Schedule No. 19.

The company filed its original complaint in the circuit court of Cook county on September 1, 1936. It prayed that temporary and permanent injunctions be issued against continued enforcement of the rates in Schedule No. 17 on the ground that those rates were confiscatory. The temporary injunction was issued on October 23, 1936, and was vacated by the appellate court on December 8, 1936. *People's Gas Light & Coke Co. v. Slattery*, 287 Ill. App. 379, 16 P.U.R. (N.S.) 381, 5 N. E. (2d) 285. March 4, 1937, it was stipulated in the circuit court that the evidence taken and to be taken before the Commission should be introduced in the hearing before the master in chancery. The appellants answered the original complaint on September 10, 1936. They denied that the company was entitled to any increase in rates and alleged that its property did not exceed \$120,000,000 in value. They stated that a fair rate of return should not be more than 6 per cent. They questioned the jurisdiction of that court and claimed that the statutory appeal was the only method by which it could obtain jurisdiction in a rate case. The company filed its amended and supplemental complaint four days after the Commission's final order was entered. Appellants filed their answers thereto on June 8 and 18, 1937. Objections and exceptions to the mas-

ter's report were overruled. A motion for re-reference was denied and the decree appealed from was rendered February 4, 1938.

At the time the petition to put Schedule No. 19 into immediate effect was filed, the Commission had before it, by stipulation made July 1, 1936, all the testimony and exhibits introduced by the company and the Commission in the hearing on Schedule No. 18, and additional testimony that had been introduced in the hearing on schedule No. 19.

The appellants contend (1) that the circuit court had no jurisdiction to enjoin the enforcement of rate Schedule No. 17 or the penalty provisions of the Public Utilities Act, because appellee had a complete, adequate, and exclusive remedy under the statute, and (2) that the suit was prematurely brought, since appellee had not exhausted its administrative remedies. In support of the decree appellee insists that the statutory remedy was inadequate and that § 68 of the act, which purports to make the remedy by appeal exclusive, deprives it of due process of law under the Fourteenth Amendment to the United States Constitution, and is an invalid restriction upon the equity jurisdiction of circuit courts in violation of § 12 of Art. 6 of the state Constitution.

The statute governing and the practice before the Illinois Commerce Commission with respect to rate cases are substantially the same as the statute and procedure governing the hearing of such cases before the Interstate Commerce Commission. *State P. U. C. ex rel. Springfield v. Springfield Gas & E. Co.* (1919) 291 Ill. 209, 215, P.U.R.1920C, 640, 125 N. E.

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891; State Pub. Utilities Commission v. Terminal R. Asso. (1917) 281 Ill. 181, P.U.R.1918B, 387, 118 N. E. 71. In the Springfield Gas Company Case we pointed out that the legislature, in creating the Public Utilities Commission, which has been superseded by the Illinois Commerce Commission, intended to create an office of dignity and great responsibility, equipped to administer justice both to individuals and to corporations. We said that there was no reason why the members of the Commission should not develop and establish a system of rules and precedents as wise and beneficial within their sphere of action, as those established by early common law judges, and that its orders should have the strength due to the judgment of a tribunal appointed by law and informed by experience.

In *Texas & P. R. Co. v. Abilene Cotton Oil Co.* (1907) 204 U. S. 426, 51 L. ed. 553, 27 S. Ct. 350, 9 Ann. Cas. 1075, the oil company sued to recover allegedly discriminatory rates charged and paid under protest. The question of jurisdiction of the trial court to entertain the suit, when no resort had been made to the Interstate Commerce Commission for relief, was presented to the United States Supreme Court on error to the court of civil appeals for the state of Texas. The court reviewed the history and provisions of the Interstate Commerce Act, which are not unlike the provisions of our Public Utilities Act, and held that the remedy was before the Commission. The court in the course of its opinion, at p. 440, of 204 U. S. made the following observations which apply most strongly to the case at bar:

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"Indeed, the recognition of such a right is wholly inconsistent with the administrative power conferred upon the Commission, and with the duty, which the statute casts upon that body, of seeing to it that the statutory requirement as to uniformity and equality of rates is observed. Equally obvious is it that the existence of such a power in the courts, independent of prior action by the Commission, would lead to favoritism, to the enforcement of one rate in one jurisdiction and a different one in another would destroy the prohibitions against preferences and discrimination, and afford, moreover, a ready means by which, through collusive proceedings, the wrongs which the statute was intended to remedy could be successfully inflicted. Indeed, no reason can be perceived for the enactment of the provision endowing the administrative tribunal which the act created with power, on due proof, not only to award reparation to a particular shipper, but to command the carrier to desist from violation of the act in the future, thus compelling the alteration of the old or the filing of a new schedule, conformably to the action of the Commission, if the power was left in courts to grant relief on complaint of any shipper, upon the theory that the established rate could be disregarded and be treated as unreasonable, without reference to previous action by the Commission in the premises. This must be, because, if the power existed in both courts and the Commission to originally hear complaints on this subject, there might be a divergence between the action of the Commission and the decision of a court. In other words, the established schedule might be found reasonable

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by the Commission in the first instance and unreasonable by a court acting originally, and thus a conflict would arise which would render the enforcement of the act impossible."

For reasons fully as cogent appellee should be remitted to its remedy before the Commission, if the remedy there is adequate and affords it due process of law. By § 8 of the Public Utilities Act (Ill. Rev. Stats. 1937, Chap. 111½, § 8, p. 2476) the Commission is vested with general supervision of all public utilities, except as otherwise provided in the act, and with power to adopt reasonable and proper rules and regulations relative to the exercise of its powers, and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings, and to alter or amend the same. Section 9 requires every public utility to furnish to the Commission all information required by it to carry into effect the provisions of the act. Article 2 provides for keeping accounts and making reports as directed by the Commission and prescribes penalties for failure so to do. Section 32 forbids any public utility to make any unjust or unreasonable charge for its service, and § 33 requires every public utility to file with the Commission and to print and keep open to public inspection schedules showing all rates and charges currently in force. Section 35 forbids public utilities from performing any service until the rates and other charges applicable thereto have been published according to the provisions of the act, except in certain emergencies. Section 36 prescribes the procedure to be followed by a utility and the Commission in order to

change rates. Unless the Commission otherwise orders, no change shall be made by any public utility in any rate or other charge except after thirty days' notice to the Commission and to the public. The manner of giving notice is prescribed and the Commission may, for good cause shown, allow changes without requiring thirty days' notice. The Commission is given power to at once enter upon a hearing as to the reasonableness of the order, either upon complaint or upon its own motion, but upon reasonable notice, the Commission may suspend the proposed rate for a period of 120 days from the time when the rate would otherwise go into effect, and in its discretion may order a further suspension not exceeding six months. The Commission may also put into force temporary rates where it finds, after hearing, that the rates charged are more than sufficient to produce a reasonable return upon the value of the utility's property. The reduction shall not exceed the overcharge so found and shall not remain in effect more than nine months, unless extended for a further period of three months by the Commission. If, upon final determination, it is found that the temporary rates charged were lower than those finally fixed, the Commission is required to permit the utility to recover the amount of loss thus sustained by a temporary future increase in rates. Section 37 forbids any public utility to charge more or less than the published rates or to make rebates except such as are regularly and uniformly extended to all corporations and persons. Section 38 forbids discrimination as to rates, charges, services, facilities, or in any other respect.

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Section 41 provides that whenever the Commission, after a hearing had upon its own motion or upon complaint, shall find that the rates charged by any public utility are unjust, unreasonable, discriminatory, or preferential, or in any wise in violation of any provisions of law, or that such rates or other charges or classifications are insufficient, the Commission shall determine the just, reasonable, or sufficient rates to be thereafter observed and in force, and shall fix the same by order. Article 5 prescribes the proceedings before the Commission and in the courts. Section 60 of the act empowers the Commission, or any commissioner, assistant commissioner, or officer of the Commission designated by it to hold hearings concerning any matters covered by the provisions of the act. The technical rules of evidence are not to bind the Commission, and no informality in the proceedings shall invalidate any order, decision, rule, or regulation of the Commission. All hearings are open to the public. Each commissioner, assistant commissioner, and each officer of the Commission is given power to administer oaths, certify to official acts, issue subpoenas, compel the attendance and testimony of witnesses and the production of papers, books, accounts, and documents. All evidence presented at a Commission hearing is made a part of the records of the Commission. Under § 64 complaints may be filed by the Commission, or by certain other persons or corporations, setting forth the act or thing done or omitted to be done in violation of the act. Upon the filing of a complaint the Commission shall cause a copy to be served upon the

corporation or person complained of, accompanied by a notice requiring that the complaint be satisfied and answered within a reasonable time to be specified by the Commission, or within the discretion of the Commission, by a notice fixing a time when and place where a hearing will be had upon the complaint. At least ten days is required after service of the notice before the hearing may be had. Service in all proceedings before the Commission may be had upon any person who could be served under the Civil Practice Act, and may be made personally or by mailing as therein provided. Section 65 makes further provisions for holding hearings upon complaints. The complainant is given a right to be heard and to introduce evidence. At the conclusion of such hearing the Commission shall make and render findings concerning the subject matter and facts inquired into and enter its order based thereon. The order must be served upon the person complained of and must be complied with in twenty days, if practicable. A full and complete record must be preserved of all proceedings had before the Commission and the testimony must be taken down by a Commission stenographer, and, if an appeal is perfected in accordance with §§ 68 and 69, it shall constitute the record of the Commission. The further pertinent provision is also made in § 65, that the procedure to be followed in the hearing of complaints shall be followed in holding hearings upon complaints, upon application, or upon its own motion. Provision is also made that any corporation affected by a ruling of the Commission entered summarily and without a hearing may ask

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for a hearing thereon, setting forth specifically, in its application, every ground of objection which it desires to urge against such ruling or order.

Section 67 of the Public Utilities Act provides: "Anything in this act to the contrary notwithstanding, the Commission may at any time, upon notice to the public utility affected, and after opportunity to be heard as provided in the case of complaints, rescind, alter, or amend any rule, regulation, order, or decision made by it. Any order rescinding, altering, or amending a prior rule, regulation, order, or decision shall, when served upon the public utility affected, have the same effect as is herein provided for original rules, regulations, orders, or decisions. Within thirty days after the service of any rule or regulation . . . any party to the action or proceeding may apply for a rehearing in respect to any matter determined in said action or proceeding and specified in the application for rehearing. The Commission shall receive and consider such application and shall grant or deny such application within twenty days from the date of the receipt thereof by the Commission. In case the application for rehearing is granted the Commission shall proceed as promptly as possible to consider the matters presented by such application. No appeal shall be allowed from any rule, regulation, order, or decision of the Commission unless and until an application for a rehearing thereof shall first have been filed with and acted upon by the Commission. No person or corporation in any appeal shall urge or rely upon any grounds not set forth in such application for a rehearing before the Commission. An

application for rehearing shall not excuse any corporation or person from complying with and obeying any rule, regulation, order, or decision or any requirement of any rule, regulation, order, or decision, . . . or operate in any manner to stay or postpone the enforcement thereof, except in such cases and upon such terms as the Commission may by order direct. If, after such rehearing and consideration of all the facts, including those arising since the making of the rule, regulation, order, or decision, the Commission shall be of the opinion that the original rule, regulation, order, or decision or any part thereof is in any respect unjust or unwarranted, or should be changed, the Commission may rescind, alter, or amend the same."

Then follows a provision that a rule or order made after such rehearing, shall not affect any right arising by virtue of the original rule, etc. Only one rehearing shall be granted by the Commission, but a petition may be filed setting up a new state of facts after two years.

Section 68 provides:

"Within thirty days after the service of any order or decision of the Commission refusing an application for a rehearing of any rule, regulation, order, or decision of the Commission, or within thirty days after the service of any final order or decision of the Commission upon and after a rehearing on any rule, regulation, order, or decision of the Commission, any person or corporation affected by such rule, regulation, order, or decision, may appeal to the circuit or superior court of the county in which the subject matter of the hearing is

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situated; or if the subject matter of the hearing is situated in more than one county, then of any one of such counties, for the purpose of having the reasonableness or lawfulness of the rule, regulation, order, or decision inquired into and determined. . . .

A circuit or superior court to which any such appeal is taken shall have the power and it shall be its duty, in term time or vacation, to hear and determine such appeal with all convenient speed. No new or additional evidence may be introduced in any proceeding upon appeal from a rule, regulation, order, or decision of the Commission, issued or confirmed after a hearing, but the appeal shall be heard on the record of the Commission as certified to by it. The finding and conclusions of the Commission on questions of fact shall be held *prima facie* to be true and as found by the Commission; and a rule, regulation, order, or decision of the Commission shall not be set aside unless it clearly appears that the finding of the Commission was against the manifest weight of the evidence presented to or before the Commission for and against such rule, regulation, order, or decision, or that the same was without the jurisdiction of the Commission. If it appears that the Commission failed to receive evidence properly proffered, on a hearing or a rehearing, or an application therefor, the court shall remand the case to the Commission with instructions to receive the testimony so proffered and rejected, and to enter a new order based upon the evidence theretofore taken, and such new evidence as it is directed to receive, unless it shall appear that such new evidence would not be controlling, in which case the

court shall so find in its order. Rules, regulations, orders, or decisions of the Commission shall be held to be *prima facie* reasonable and the burden of proof upon all issues raised by the appeal shall be upon the person or corporation appealing from such rules, regulations, orders, or decisions.

"When no appeal is taken from a rule, regulation, order, or decision of the Commission, as herein provided, parties affected by such rule, regulation, order, or decision shall be deemed to have waived the right to have the merits of said controversy reviewed by a court and there shall be no trial of the merits of any controversy in which such rule, regulation, order, or decision was made, by any court to which application may be made for a writ to enforce the same or in any other judicial proceeding."

[1, 2] First: Did appellee exhaust its remedy before the Commission? The rule is well established that a suitor must exhaust his administrative remedies before seeking the extraordinary relief of a court of equity. *Chicago, N. S. & M. R. Co. v. Chicago* (1928) 331 Ill. 360, 163 N. E. 141; *Hoyne v. Chicago & O. P. Elevated R. Co.* (1920) 294 Ill. 413, 423, P.U.R.1921A, 328, 128 N. E. 587; *Natural Gas Pipeline Co. v. Slaterry* (1937) 302 U. S. 300, 310, 82 L. ed. 276, 21 P.U.R.(N.S.) 255, 58 S. Ct. 199; *United States v. Illinois C. R. Co.* (1934) 291 U. S. 457, 78 L. ed. 909, 54 S. Ct. 471; *West New York v. Public Utility Comrs.* 105 N. J. Eq. 438, P.U.R.1930B, 330, 148 Atl. 402; *McCullum v. Southern Bell Teleph. & Teleg. Co.* (1931) 163 Tenn. 277, P.U.R.1932A, 462, 43 S. W. (2d) 390. This requirement is

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laid down so that the administrative body may have an opportunity to correct its errors and thus do away with the necessity for a resort to the courts. *Natural Gas Pipeline Co. v. Slattery, supra*. In *Hoyne v. Chicago & O. P. Elevated R. Co. supra*, at p. 422 of 294 Ill. (P.U.R.1921A, at p. 336), we said:

"Section 68 of the same act gives any person or corporation affected by such order or decision an appeal to the circuit court of Sangamon county for the purpose of having the reasonableness or lawfulness of the order or decision inquired into and determined. Appeals from all final orders and judgments of the circuit court may also be taken directly to this court by either party to the action. The Commission being invested with full authority and power to thus grant a hearing and to enter its order upon its findings, and all rights being saved by appeal to any party affected by its decision, appellant has failed to make good his contention that the order of the Commission was void for the reasons aforesaid and therefore subject to attack by this collateral proceeding as a void order. The court, therefore, properly sustained the demurrer to the information. The city, or any one affected by the order in question, had a complete remedy at law by appealing from the order in the mode pointed out by statute." To the same effect see *Acme Printing Ink Co. v. Nudelman* (No. 24973).

Natural Gas Pipeline Co. v. Slattery, supra, involved a direct appeal to the United States Supreme Court from a decision of three judges sitting in the Federal court for the northern district of Illinois denying an inter-

locutory injunction restraining the members of the Illinois Commerce Commission from enforcing an order on appellant to open its records and accounts to inspection by the Commission and to furnish certain statistical data for use in a proceeding before it to fix the gas rates to be charged by one of appellant's affiliates. Without asking the Commission to modify or curtail its order, appellant filed suit under § 266 of the Judicial Code (28 USCA § 380) for a temporary restraining order. The United States Supreme Court affirmed the district court, holding that appellant had not exhausted its administrative remedies. On pages 309 and 310 of 302 U. S. (21 P.U.R.(N.S.) at p. 260) it said:

"It is said that equity alone can afford adequate relief, because of the cumulative penalties for failure to comply with the order. See §§ 76 and 77 of the act.

"We have no occasion to consider the merits of these objections. It suffices to say that the statute itself provides an adequate administrative remedy which appellant has not sought. By §§ 64 and 65 of the act the Commission was authorized on its own motion or on application of appellant to order a hearing to ascertain whether the present order was 'improper, unreasonable, or contrary to law.' Section 67 authorizes the Commission at any time, upon proper notice and hearing to 'rescind, alter, or amend any . . . order or decision made by it.' . . .

"As the act imposes penalties of from \$500 to \$2,000 a day for failure to comply with the order, any application of the statute subjecting appellant to the risk of the cumulative pen-

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alties pending an attempt to test the validity of the order in the courts and for a reasonable time after decision, would be a denial of due process. Ex parte Young (1908) 209 U. S. 123, 147, 52 L. ed. 714, 723, 28 S. Ct. 441, 13 L.R.A.(N.S.) 932, 14 Ann. Cas. 764; Missouri P. R. Co. v. Tucker (1913) 230 U. S. 340, 349, 57 L. ed. 1507, 1510, 33 S. Ct. 961; see Wadley Southern R. Co. v. Georgia, 235 U. S. 651, 659, 59 L. ed. 405, 410, P.U.R.1915A, 106, 35 S. Ct. 214, but no reason appears why appellant could not have asked the Commission to postpone the date of operation of the order pending application to the Commission for modification. Refusal of postponement would have been the occasion for recourse to the courts. Compare Oklahoma Nat. Gas Co. v. Russell, 261 U. S. 290, 293, 67 L. ed. 659, 662, P.U.R.1923C, 701, 43 S. Ct. 353, with Prentiss v. Atlantic Coast Line Co. (1908) 211 U. S. 210, 53 L. ed. 150, 29 S. Ct. 67; Ex parte Young, *supra*. But appellant did not ask postponement."

Appellee relies on Pacific Teleph. & Telegr. Co. v. Kuykendall, 265 U. S. 196, 68 L. ed. 975, P.U.R.1924D, 781, 44 S. Ct. 553; Prendergast v. New York Teleph. Co. 262 U. S. 43, 67 L. ed. 853, P.U.R.1923C, 719, 43 S. Ct. 466, and Oklahoma Nat. Gas Co. v. Russell, 261 U. S. 290, 67 L. ed. 659, P.U.R.1923C, 701, 43 S. Ct. 353, in support of its contention that a court of equity may enjoin rates which have not been finally completed, where the rates have become confiscatory. A brief review of those cases shows that they are harmonious with Natural Gas Pipeline Co. v. Slatery, *supra*, and with the above cited 28 P.U.R.(N.S.)

cases holding that administrative remedies must be exhausted before resort to judicial relief may be had. Section 266 of the Judicial Code permits a 3-judge Federal court, constituted as therein provided to issue injunctions restraining the enforcement of state statutes, where it appears that the statute or order is unconstitutional and irreparable injury will result. The application for such injunction is given precedence over other cases and a prompt hearing is required. The Federal courts have consistently refused to enjoin orders of administrative boards unless the persons affected thereby have first exhausted their administrative remedies. The cases relied upon by the appellee do not attempt to pass upon the validity of the procedure adopted by the states, or to decide if that procedure is exclusive so as to deprive state equity courts of jurisdiction. Indeed, that question is immaterial when a Federal court is seeking to determine if it shall exercise Federal equity jurisdiction. All that need be determined by those courts is whether the case is ripe for judicial action, since the states are powerless to deprive Federal courts of their jurisdiction by making a remedy exclusive in the state courts. In *Di Giovanni v. Camden Fire Insurance Asso.* (1935) 296 U. S. 64, 69, 80 L. ed. 47, 56 S. Ct. 1, in discussing the difference as to jurisdiction in Federal equity courts, the Supreme Court of the United States said: "It is true, as this court has often pointed out, that the inadequacy prerequisite to relief in a Federal court of equity is measured by the character of remedy afforded in Federal rather than in state courts of law. See *Henrietta Mills v.*

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Rutherford County (1930) 281 U. S. 121, 74 L. ed. 737, 50 S. Ct. 270; Smyth v. Ames (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418; Risty v. Chicago, R. I. & P. R. Co. (1926) 270 U. S. 378, 70 L. ed. 641, 46 S. Ct. 236. This follows from the nature of 'equity jurisdiction' of the Federal courts. Whether a suitor is entitled to equitable relief in the Federal courts, other jurisdictional requirements being satisfied, is strictly not a question of jurisdiction in the sense of the power of a Federal court to act. It is a question only of the merits; whether the case is one for the peculiar type of relief which a court of equity is competent to give. See *Pennsylvania v. Williams* (1935) 294 U. S. 176, 181, 79 L. ed. 841, 845, 55 S. Ct. 380, 96 A.L.R. 1166. If a plaintiff is entitled to be heard in the Federal courts he may resort to equity when the remedy at law there is inadequate, regardless of the adequacy of the legal remedy which the state courts may afford. Otherwise the suitor in the Federal courts might be entitled to a remedy in equity which the Federal courts of law are competent to give, or, on the other hand, be obliged to forego his right to be heard in the Federal courts in order to secure an equitable remedy which state courts of law do but the Federal courts of law do not give. See *Stratton v. St. Louis S. W. R. Co.* (1932) 284 U. S. 530, 533, 76 L. ed. 465, 469, 52 S. Ct. 222; *Mathews v. Rodgers* (1932) 284 U. S. 521, 529, 76 L. ed. 447, 454, 52 S. Ct. 217."

In *Pacific Teleph. & Teleg. Co. v. Kuykendall*, *supra*, the company was denied a petition for increase in rates. It then had the right to apply for a

writ of review in a state court for the purpose of having the reasonableness of the order determined judicially. Instead of applying to that court, the company filed a bill under § 266 of the Judicial Code in the Federal court. The application for a temporary restraining order was denied and the bill was dismissed. In reversing the district court, Chief Justice Taft said: "It is apparent from these provisions that after the Commission finally denied the increase of rates applied for, the company had exhausted its administrative remedy to avoid the alleged confiscatory rates under which it was compelled to render the service. It had, therefore, no recourse but to a court. . . . The state statute forbidding a stay of proceedings until a final judicial decree was rendered, of course, could not prevent a Federal court of equity from affording such temporary relief by injunction as the principles of equity procedure required." (P.U.R.1924D, at p. 785.)

In *Prendergast v. New York Teleph. Co.* *supra*, a temporary injunction was granted against a reduction of rates pending final determination of the maximum rates to be charged. The court emphasized, on p. 48 of 262 U. S., the fact that the New York statute did not require an application for rehearing to be filed, in holding that the company had exhausted its administrative remedy. The Public Utilities Act of this state does require such application. That this is the basis of the court's decision with reference to the same statute is borne out by *Banton v. Belt Line R. Corp.* (1925) 268 U. S. 413, 416, 69 L. ed. 1020, P.U.R.1926A. 317, 320, 45 S. Ct. 534, where the court said:

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"No application to the Commission for relief was required by the state law."

In *Oklahoma Nat. Gas. Co. v. Russell*, *supra*, the companies applied to the Commission for higher rates, but were denied an advance. The Constitution of Oklahoma gave an appeal to the supreme court of the state, acting in a legislative capacity, with power to substitute a different order and to grant a supersedeas in the meantime. Appeals were taken to the supreme court and supersedeas was applied for and refused. While the appeals were still pending the companies applied to the Federal court for relief, but their applications were denied. In reversing the decrees, Justice Holmes said (P.U.R.1923C, at p. 703): "Coming to the principal question, if the plaintiffs respectively can make out their case, as must be assumed for present purposes, they are suffering daily from confiscation under the rate to which they now are limited. They have done all that they can under the state law to get relief and cannot get it."

In the case under consideration it is apparent that appellee has not done all it can do under the statute to get relief. It is, therefore, obvious that resort to the courts is premature. It could have applied to the Commission for a rehearing of its petition to put schedule No. 19 into immediate effect, and if a rehearing had been granted there would be no necessity for resort to the courts. Instead of immediately filing the present suit to restrain the enforcement of the rates established by schedule No. 17, appellee could have made application to the

Commission to establish reasonable rates under § 41 of the statute. This it did, in effect, when it filed schedule No. 19 and asked that it be put into immediate effect. The question of the confiscatory nature of the existing rates could thus have been directly presented to the Commission for decision. If the existing rates were found to be reasonable, appellee could have asked for a rehearing and, upon its denial, could have gone into the Federal courts under § 266 of the Judicial Code. It was not free to disregard the administrative procedure set up by the statute, which we think is eminently adapted to afford due process of law, and asked for relief at the hands of a single judge. We are not concerned with the wisdom of the legislative policy to have public utilities under the supervision of a body of men experienced in that field, rather than under the courts, but, as long as the statute is reasonable and affords due process of law, there is no doubt of the legislature's power to make the statutory remedy exclusive. It is worthy of mention that if resort is had to the Federal courts for relief from the orders of such a body, one judge may not enjoin a state statute, or an order of a state Commission, but a court of three judges must be called, and one of the three must be either a justice of the United States Supreme Court or a judge of the circuit court of appeals. Strong and impelling reasons must be shown before we can permit appellee to disregard the statute and resort to the courts without giving the Commission an opportunity to correct any errors it may have made. We hold that the suit was prematurely brought, for the reason that

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appellee did not exhaust its administrative remedies.

[3] The foregoing, in effect, disposes of the case, but appellee has made an argument against the validity of § 68 of the Public Utilities Act which we will consider briefly. It must be noted that appellee has not reached the stage where judicial review would be of any benefit to it. The company is not in position to appeal from the order denying its petition to put Schedule No. 19 into immediate effect, or the final order denying leave to put that schedule into effect, since it did not file a petition for rehearing. The argument on this point also involves appellant's contention that appellee's remedy under the statute was complete and adequate, and, therefore, equity had no jurisdiction of this suit. It is fundamental that the aid of equity can only be invoked in the absence of an adequate legal remedy. *White v. Ottawa* (1925) 318 Ill. 463, 149 N. E. 521; *Heinroth v. Kochersperger* (1898) 173 Ill. 205, 50 N. E. 171.

Appellee expresses doubt that the order denying its petition to put Schedule No. 19 into immediate effect was appealable, even if it had asked for a rehearing. The act of 1913 provided for appeals within thirty days after a "final hearing" (Laws of 1913, p. 495) but the present statute provides for appeals from "any order or decision of the Commission refusing an application for a rehearing of any rule, regulation, order, or decision of the Commission, or . . . after the service of any final order or decision" (Laws of 1921, p. 742) and we must presume that the change was intentionally made so that all orders

could be appealed from. Appellee further insists that the judicial review provided by the statute would be ineffective, since the court could only affirm or set aside the order of the Commission, and could not modify it or grant an increase of rates. It relies on *People's Gaslight & Coke Co. v. Chicago* (1923) 309 Ill. 40, P.U.R. 1924A, 291, 139 N. E. 867; *Alton & S. R. Co. v. Commerce Commission ex rel. Perry Coal Co.* 316 Ill. 625, P.U.R. 1925D, 251, 147 N. E. 417; *Illinois Commerce Commission ex rel. Lumaghi Coal Co. v. Chicago & E. I. R. Co.* (1928) 332 Ill. 243, P.U.R. 1929C, 679, 163 N. E. 664. This objection is characteristic of all judicial relief. Courts cannot grant increases of rates, because such action is legislative. All that courts can do is to determine if the rates established are reasonable and constitutional. The decree appealed from simply enjoined the enforcement of Schedule No. 17, and did not fix new rates. If the appellee had seen fit to apply to the Commission for a hearing on the question of the confiscatory nature of those rates, it could then have appealed, under the statute, and have had the same kind of decision, but we could not have established rates.

[4, 5] Appellee contends that the Public Utilities Act is void, because it makes the orders of the Commission final and precludes effective judicial relief. Rates made by the general assembly or by a Commission are both legislative in their nature (*Grand Trunk Western R. Co. v. Indiana R. Commission* [1911] 221 U. S. 400, 403, 55 L. ed. 786, 31 S. Ct. 537) and any party affected by legislative action is entitled, by the due process clause, to

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a judicial review of the question as to whether he has been thereby deprived of a right protected by the Constitution. The right to judicial review cannot be so limited that it can be had only at the risk of incurring penalties so heavy that the company would yield to a void order rather than risk the punishment that might be imposed if the rates should later be declared to be valid. *Ex parte Young* (1908) 209 U. S. 123, 52 L. ed. 714, 28 S. Ct. 441, 13 L.R.A.(N.S.) 932, 14 Ann. Cas. 764; *Missouri P. R. Co. v. Tucker* (1913) 230 U. S. 340, 349, 57 L. ed. 1507, 33 S. Ct. 961; *Ohio Valley Water Co. v. Ben Avon*, 253 U. S. 287, 64 L. ed. 908, P.U.R.1920E, 814, 40 S. Ct. 527. But if resort may be had to the courts without the risk of incurring such penalties, due process of law is afforded. *Wadley Southern R. Co. v. Georgia*, 235 U. S. 651, 59 L. ed. 405, P.U.R.1915A, 106, 35 S. Ct. 214; *Natural Gas Pipeline Co. v. Slattery* (1937) 302 U. S. 300, 82 L. ed. 276, 21 P.U.R.(N.S.) 255, 58 S. Ct. 199. Plainly the Illinois statute does not hinder access to the courts by excessive penalties. Adequate provision is made for the stay of proceedings pending appeal. Appellee attacks that part of § 71 which provides that: "When any rate or other charge has been in force for any length of time exceeding one year, and such rate or other charge is advanced by the public utility and the order of the Commission reinstates such prior rate or other charge, in whole or in part, no suspending order shall be allowed in any case from such order pending the final determination of the case in the circuit or superior court, or if appealed 28 P.U.R.(N.S.)

to the supreme court by such supreme court," and insists this deprives it of due process of law. However, the right to an appeal or writ of error does not require that the same shall be made a supersedeas. *State P. U. C. ex rel. Mitchell v. Chicago & W. T. R. Co.* (1916) 275 Ill. 555, 570, P.U.R. 1917B, 1046, 114 N. E. 325, Ann. Cas. 1917C, 50. There is nothing unreasonable in forbidding a suspending order where a rate has been in effect for a year or more, where the Commission reinstates such rate. All this must be done after a full hearing. Appellee would be in a similar position if it were denied an injunction by the circuit court, because in that case, it could do nothing to escape confiscation pending review. The statute gives precedence to cases arising under it, so that such cases may be determined with dispatch. The remedy it provides may be just as speedy as the remedy of injunction, and is reasonable.

The validity of legislation like that now before us has not been passed upon in many cases. We upheld the 1913 act in *State P. U. C. ex rel. Mitchell v. Chicago & W. T. R. Co. supra*, and said (P.U.R.1917B, at p. 1058): "Appellants' contention that the act is invalid because the procedure provided by Art. 5 is not according to the course of the common law of the Constitutions, state and Federal, cannot be sustained. The hearing in this case is to be had before an organized tribunal. Appellants are entitled to be present and to contest the facts on the merits. The constitutional requirements of the due process clause are complied with if the person affect-

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ed has sufficient notice and adequate opportunity to be heard."

The Public Utilities Act of Ohio, which contains provisions substantially like our own, was upheld in *Hocking Valley R. Co. v. Public Utilities Commission* (1919) 100 Ohio St. 321, 126 N. E. 397, 400, against the contention that it did not afford due process of law. The Ohio court relied principally upon *Wadley Southern R. Co. v. Georgia*, *supra*. The Supreme Court of the United States upheld the Oregon statute against the contention that it denied due process of law, in *Portland R. Light & P. Co. v. Railroad Commission* (1913) 229 U. S. 397, 57 L. ed. 1248, 33 S. Ct. 820, and *Southern P. Co. v. Campbell* (1913) 230 U. S. 537, 57 L. ed. 1610, 33 S. Ct. 1027. The cases of *Oklahoma Nat. Gas Co. v. Russell*, 261 U. S. 290, 67 L. ed. 659, P.U.R. 1923C, 701, 43 S. Ct. 353; *Pacific Teleph. & Teleg. Co. v. Kuykendall*, 265 U. S. 196, 68 L. ed. 975, P.U.R. 1924D, 781, 44 S. Ct. 553, and *Prendergast v. New York Teleph. Co.* 262 U. S. 43, 67 L. ed. 853, P.U.R.1923C, 719, 43 S. Ct. 466, as demonstrated before, did not involve the validity of any state statute, but simply held that the Federal courts had equity jurisdiction to enjoin confiscation, where the utility had exhausted its administrative remedies.

[6] Appellee contends § 68 is void

because it deprives the circuit court of the original equity jurisdiction conferred by § 12 of Art. 6 of the Illinois Constitution. The rule is firmly established that in special statutory proceedings the legislature may confer jurisdiction to determine the questions arising therein on any court that it may choose, to the exclusion of all others, and if such acts furnish adequate protection to the rights of the persons concerned they will be sustained by the court. *White v. Ottawa*, (1925) 318 Ill. 463, 149 N. E. 521; *People ex rel. Munn v. McGoorty* (1915) 270 Ill. 610, 110 N. E. 791. Although this question was not expressly decided, we held in *Hoyne v. Chicago & O. P. Elevated R. Co.* (1920) 294 Ill. 413, P.U.R.1921A, 328, 128 N. E. 587, that courts of equity have no jurisdiction, because the remedy under the statute is complete and adequate. The constitutional provision was not intended to prevent the legislature from providing adequate and exclusive legal remedies such as these when it sees fit. This contention must be overruled.

Our discussion applies alike to the original and to the amended and supplemental bills. The circuit court was without jurisdiction and its decree is, therefore, reversed.

Decree reversed.

Stone and Jones JJ., dissenting.

WISCONSIN PUBLIC SERVICE COMMISSION

WISCONSIN PUBLIC SERVICE COMMISSION

Re Nelson Telephone Company

[2-SB-117.]

Security issues, § 44 — Authorization — Duplication of issues.

1. A public utility which has outstanding Commission authorization to issue common stock for the same purposes for which it applies, in part, to issue bonds, should not be authorized to issue such bonds, p. 117.

Security issues, § 49 — Factors involved — Finances.

2. The Commission is required by statute to find that the financial condition, plan of operation, and proposed undertakings of the public utility applying for authority to issue bonds to pay its outstanding indebtedness will afford reasonable protection to purchasers of the securities to be issued before a certificate of authority may be granted, p. 118.

Security issues, § 95 — Kinds — Earnings as a factor — Bonds or stock.

3. A company should not be permitted to incur debt by issuing bonds until it can demonstrate by past performance or reasonable prospect its ability to pay the fixed charges on that debt, but its capital financial requirements should be met by the issuance of common stock until it has demonstrated such ability, p. 118.

[February 25, 1939.]

APPPLICATION by telephone company for authority to issue bonds; denied.

By the COMMISSION: The application in this case was filed with the Commission on January 14, 1939, and requests, in substance, authority to issue \$6,500 of 10-year 5 per cent first mortgage bonds for the purpose of securing funds with which (a) to refund \$3,900 of short-term notes payable, and (b) to provide \$2,600 to pay for the metalicizing of its lines.

The petitioner is a telephone utility rendering service to approximately 164 customers in and around the vil-

lage of Nelson, Buffalo county, through a magneto switchboard. All of its rural circuits, which serve the majority of its customers, are grounded while its local circuits are partly metallic and partly grounded.

With the application the petitioner submitted its balance sheet as of December 31, 1937, and its income statement for the year ended December 31, 1937. The balance sheet is shown below as Table I:

RE NELSON TELEPHONE CO.

TABLE I

Assets:	
Telephone plant	\$18,851.95
Less depreciation reserve	4,511.70
Net book cost of telephone plant	\$14,340.25
Cash	23.08
Notes receivable	322.56
Due from subscribers and agents	1,021.75
Total assets	<u>\$15,707.64</u>
Liabilities:	
Common stock	\$6,000.00
Mortgage due 1940	3,500.00
Notes payable	3,900.00
Accounts payable	300.19
Miscellaneous current and accrued liabilities	247.37
Surplus	*1,760.08
Total liabilities	<u>\$15,707.64</u>

* The balance sheet submitted in the application was out of balance by 95 cents which, in this table, has been adjusted through surplus.

The income statement for the year ended December 31, 1937, and a comparison with the two previous years is shown in condensed form in Table II:

[1] The company now has authority to issue \$4,000 of common stock in addition to the \$6,000 of common stock shown as outstanding in Table I. This \$4,000 of authorized, but unsold, common stock was authorized to be sold for cash for the purpose of paying outstanding indebtedness. In other words, the company now has authority to issue common stock for the same purposes for which it applies, in part, to issue bonds. Obviously, this duplication should not be permitted.

Under the pending proposal the company would have interest charges of \$500 per year, as follows:

Annual interest at 5% on existing \$3,500 mortgage	\$175.00
Annual interest at 5% on proposed \$6,500 bonds	325.00
Total	<u>\$500.00</u>

Based upon the 1937 operations the income of the company would fail to cover the interest on existing and pro-

TABLE II

	1935	1936	1937
Operating revenues	\$3,321.49	\$3,373.77	\$3,226.55
Operating expenses	\$1,784.00	\$1,876.33	\$2,043.18
Depreciation expense	780.00	780.00	780.00
Tax expense	201.08	133.22	171.98
Total operating expense	<u>\$2,765.08</u>	<u>\$2,789.55</u>	<u>\$2,995.16</u>
Net operating revenue	\$556.41	\$584.22	\$231.39
Nonoperating revenue	40.80	25.80	....
Gross income	<u>\$597.21</u>	<u>\$610.02</u>	<u>\$231.39</u>
Interest on mortgage	\$175.00	\$175.00	\$175.00
Interest on floating debt	303.60	236.17	226.31
Total interest deductions	<u>\$478.60</u>	<u>\$411.17</u>	<u>\$401.31</u>
Net income (deficit)	<u>\$118.61</u>	<u>\$198.85</u>	<u>(\$169.92)</u>

WISCONSIN PUBLIC SERVICE COMMISSION

posed indebtedness, as shown by Table III:

TABLE III

Gross income	\$231.39
Interest on existing \$3,500 mortgage	\$175.00
Annual interest on proposed \$6,500 of bonds	325.00
Total interest charges	\$500.00
Net deficit	\$268.61

[2] Under the provisions of § 184.06, Statutes, we are required to find that the financial condition, plan of operation, and proposed undertakings of the corporation will afford reasonable protection to purchasers of the securities to be issued before a certificate of authority may be granted.

[3] With the exception of a slight increase in 1936, the total operating revenues of the company have been declining steadily for the past seven years and there is nothing in the record now before us to indicate that the revenues will show an increase. It is true that there is pending an application of the company to increase rates (2-U-1403). This rate application will be considered on its merits. Whether any increase in rates, if granted, will result in a sufficient increase in revenues to provide for the interest charges attendant upon the proposed debt program of the company is speculative. Sound principles of finance indicate that a company should not be permitted to incur debt until it can demonstrate by past performance or reasonable prospects its ability to pay the fixed charges on that debt. Any other policy would involve financial consequences adversely affecting the public served by the company and the reasonable protection to purchasers of the securities.

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An examination of our records shows that the company has made other applications for authority to issue securities senior to common stock. On August 17, 1936, it applied for authority to issue \$5,000 of 5 per cent bonds (2-SB-71 [15 P.U.R.(N.S.) 381]). On February 20, 1933, it applied for authority to issue \$4,000 of 6 per cent cumulative preferred stock (2-SB-33 [1 P.U.R.(N.S.) 526]) and on April 1, 1932, it applied, in part, for authority to issue \$5,000 of 7 per cent cumulative preferred stock (2-SB-22). We denied the authority to issue these securities in each case, basing our denial on the financial condition of the company and indicating that the company had authority to obtain funds by the issuance of \$4,000 of common stock. As previously stated, this amount of common stock has not been issued.

In view of the facts now before us, we cannot find that reasonable protection will be afforded to the purchasers of the \$6,500 of bonds, authority for the issuance of which is requested by the petitioner. It follows that the pending application should be denied. It is our opinion that the future capital financial requirements of the company should be met by the issuance of common stock until the company has demonstrated its ability to earn the fixed charges on securities senior thereto.

Findings

The Commission therefore finds and determines that the proposed issuance of bonds does not comply with the provisions of Chap. 184 of the Statutes.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

L. M. Scholl

v.

Max Weisberger et al. Trading As
McKeesport Milk Company

[Complaint Docket No. 12584.]

Certificates of convenience and necessity, § 49 — When required — Motor carriers — Milk carriage.

A milk company which purchases milk f. o. b. at its plant cannot transport such milk from farmers to its plant for compensation without Commission authorization, since the Public Utility Law applies to transportation of any class of property for compensation.

[February 27, 1939.]

COMPLAINT that respondent is transporting property for hire without Commission authorization; complaint sustained.

By the COMMISSION: In August, 1933, L. M. Scholl, the complainant in this proceeding, applied for and received a certificate of public convenience from the Public Service Commission (A. 28957). That certificate authorized transportation of dairy and farm products from points in the township of South Huntingdon, Westmoreland county, to the city of McKeesport. It was established of record that the complainant has continuously, since the granting of said certificate, operated in accordance with its provisions, and has complied with all of the rules and regulations of the Public Utility Commission and its predecessor, the Public Service Commission.

It appears from the record that the complainant has, since securing a cer-

tificate of public convenience, confined his services almost exclusively to the transportation of milk from farms in the area prescribed in his certificate, to the McKeesport Milk Company, located in the city of McKeesport. The McKeesport Milk Company, during all of this time, was, and is now, owned and operated by Max Weisberger, one of the respondents in this proceeding. In the earlier days of this transportation service, payment was made directly to the complainant by the individual farmers whose milk was carried to its marketing point. Later, this system of payment was abandoned in favor of a plan whereby the milk company would pay the transportation charges directly to the carrier, and these charges would in turn be deducted from the

PENNSYLVANIA PUBLIC UTILITY COMMISSION

farmer's monthly milk check in accordance with the carrier's tariff rate as filed with the Commission. It was testified that this later plan was adopted as a matter of convenience.

In the summer of 1938, respondent, Herman Weisberger, son of Max Weisberger, was unemployed. The record reveals that at this point, the other members of the family decided to "create" work for him. Accordingly, it was decided to have Herman take over the transportation business operated by the complainant. A truck was purchased in the name of another son, Robert Weisberger, and turned over to Herman. All of the farmers were called in and informed that unless they shipped on the truck operated by Herman Weisberger, their milk would not be accepted. Faced with the alternatives of shipping through Weisberger's facilities or losing their market, all of Scholl's shippers chose the former, and the complainant's business was destroyed.

The new arrangement effected no change in the method of operation or payment other than the substitution of Herman Weisberger in the place of L. M. Scholl. The same method of payment through deductions was continued as was the same transportation charge, which charge was based upon the complainant's filed tariff. The McKeesport Milk Company, Herman Weisberger, and Robert Weisberger, do not have, nor have they applied for, authority from the Public Utility Commission to transport property for compensation.

Respondents also contend that their operations are not subject to Commission jurisdiction, and in support of that contention, cite *Dairymen's Co-* 28 P.U.R.(N.S.)

operative Sales Asso. v. Public Service Commission (1935) 318 Pa. 381, 177 Atl. 770, 98 A.L.R. 218, affirming the decision of the superior court in (1934) 115 Pa. Super. Ct. 100, 174 Atl. 826. We do not feel, however, that this case is controlling in the present situation. The *Dairymen's Case* dealt with carriers, transporting milk under contract with a coöperative association, from farmers who were members of the coöperative. In the instant case, no coöperative is involved. All parties deal with each other individually. The farmer produces the milk and sells it f. o. b. at the milk company's plant. The carrier transports the farmer's milk and is paid by the farmer through the medium of the milk company as a convenience. The milk company purchases the milk f. o. b. at its plant only if it meets the company's and the Milk Control Commission's standards. When the milk company takes over the business of transporting milk from farmers to its plant for compensation, it invades a field which is subject to the jurisdiction of this Commission, and it cannot legally do so without Commission authorization. The Pennsylvania Public Utility Law is applicable to all transportation of property or any "class" of property for compensation. The legislature did not exempt the transportation of milk from the jurisdiction of the Commission. Therefore, we are of the opinion that the transportation here complained of is subject to Commission jurisdiction.

Among the cases referred to, but distinguished in the decision of the superior court in the *Dairymen's Coöperative Case*, *supra*, is that of *West*

SCHOLL v. WEISBERGER

v. Western Maryland Dairy Co. (1926) 150 Md. 641, P.U.R.1927B, 524, 529, 135 Atl. 136, which was decided by the court of appeals of Maryland. That case is in many respects analogous to the situation here considered. There, as here, the dairy took over certificated routes and undertook to transport milk from farmers to its plant in its own trucks, charging for and collecting transportation charges in exactly the same manner.

The Maryland court found that the milk was delivered f. o. b. at the dairy in Baltimore. The court in that case said:

"It is true that Hartman K. Harrison, vice president of the Western Maryland Dairy, Incorporated, carefully avoided saying that the amount received by the company is a charge for transportation of the milk, but spoke of it as a 'differential,' a difference only in name. If the ownership of the milk was in the producer while in transportation, which we think it was, we cannot conceive upon what principle it could be held that the appellee in the operation of its trucks, in the manner stated, is not subject to the supervision of the Public Service Commission of Maryland, and in holding that the ownership in milk was at such time in the producer we are not to be understood as holding that upon all the facts of this case the company would be exempt from the provision of said act if it was found that the title to the milk was at that time in the company, as that question need not be decided in the disposition of this case. The effort of the appellee to escape the supervision of the Commission upon the grounds stated by it is, we think,

to say the least, an attempt to evade the statute, and it should be so treated."

The only real difference between the above case and the situation here considered is the fact that the Western Maryland Dairy purchased the routes which it took over.

If the respondents in this case are permitted to take over complainant's business without restraining action from this Commission, then neither the complainant's certificate of public convenience nor the approximately 2,500 other certificates held by milk carriers will be worth the paper they are written on. These carriers, many of whom have been rendering service for very many years, came to the Commission and secured certificates of public convenience. Some of them commenced their service prior to the days of good roads and have developed into extensive well-equipped operations in which they have invested thousands of dollars in equipment and years of personal effort. They have complied with all of the Commission's rules and regulations. In short, they have borne the burdens of regulation and should, therefore, be given whatever protection regulation affords.

The following quotation from *Restivo v. West* (1925) 149 Md. 30, P.U.R.1926A, 639, 642, 129 Atl. 884, was cited in *West v. Western Maryland Dairy Co. supra*, at p. 528 of P.U.R.1927B:

"It is difficult to determine with exactness just when the owner of a motor vehicle is operating as a common carrier, as that term is ordinarily understood in the law, but the courts have not been inclined to excuse the increasing numbers of those who earn their livelihood by transporting per-

PENNSYLVANIA PUBLIC UTILITY COMMISSION

sons or goods for hire in motor vehicles from the responsibilities of common carriers simply on technical grounds, and they have been particularly slow to excuse them when their plan of operation bore evidence of being a studied attempt to reap the rewards of common carriers without incurring the corresponding liabilities.' "

This Commission is of the opinion that the McKeesport Milk Company, as well as the other respondents named in this complaint, have engaged in a manner detrimental to public interest in a studied attempt to reap the rewards of common carriers without incurring the corresponding liabilities.

TEXAS COURT OF CIVIL APPEALS. AUSTIN

Railroad Commission et al. v. Highway Insurance Underwriters

[No. 8793.]

(124 S. W. (2d) 413.)

Commissions, § 17 — Express and implied powers.

1. Administrative agencies have only such powers as are expressly granted by statute, or such as are necessarily implied therein, to enable them to carry out the purposes of the statute, p. 123.

Insurance — Powers of Commission.

2. The Commission is not expressly nor by implication given any power to prescribe the terms or conditions upon which an insurance company may be authorized to do business in the state, since that is a matter governed by the insurance laws, and administered exclusively by the Board of Insurance Commissioners, p. 123.

Insurance — Powers of Commission.

3. The Commission's rule requiring an insurance company which is licensed to do business in the state to deposit \$50,000 in cash or securities with the state treasurer is not authorized by the statute empowering the Commission to require policies of applicants for certificates of convenience and necessity, but constitutes an invasion by the Commission of a field of regulation vested exclusively in the Board of Insurance Commissioners, p. 124.

[January 25, 1939.]

APPPEAL from decree enjoining enforcement of Commission's rule; affirmed.

RAILROAD COM. v. HIGHWAY INSURANCE UNDERWRITERS

APPEARANCES: William McCraw, Attorney General, and Albert G. Walker, Assistant Attorney General, for plaintiffs in error; Jess D. Carter, of Austin, for defendant in error.

BAUGH, J.: The Highway Insurance Underwriters brought this suit against the Railroad Commission to enjoin the enforcement of a rule promulgated by it on October 1, 1928. Temporary injunction was granted, and after a trial to the court on the merits, was made permanent; hence this appeal.

Pursuant to authority vested in the Commission in § 13, Art. 911b, Vernon's Ann. Tex. Statutes, as variously amended, the Railroad Commission duly promulgated on October 1, 1928, the following rule: "The Railroad Commission will approve policies covering loss or damage to cargo and public liability and property damage insurance, only when the company writing same is authorized by law to write such business in the state of Texas, and has on deposit with the state treasurer \$50,000 in cash or securities."

The power of the Commission to require of motor carriers bonds or policies of insurance against personal injuries and property damage is not questioned. The sole question here presented is whether it had the right to refuse to accept bonds tendered by applicants for a certificate of public convenience and necessity unless and until the surety, or indemnitor, on such bond showed that it had on deposit with the state treasurer \$50,000 in cash or securities. It is the contention of the Commission that it had such power under the authority granted it by the statute above referred to.

This statute provides, among other things, that "such motor carrier shall file with the Commission bonds and/or insurance policies issued by some insurance company, including mutuals and reciprocals or bonding company authorized by law to transact business in Texas in an amount to be fixed by the Commission under such rules and regulations as it may prescribe," etc.

While § 13, Art. 911b, deals at some length with the character, provisions, and requirements that such insurance policy or bond must contain, the language above quoted is the only language in the statute relating to the requirements of the company writing such policy or bond. That is, that it must be "authorized by law to transact business in Texas."

It is manifest, we think, that that portion of the order undertaking to require of such company, after it has been authorized by law and the Board of Insurance Commissioners to do business in Texas, also to have on deposit with the state treasurer \$50,000 in cash or securities, is clearly not authorized under the provisions of Art. 911b, § 13.

[1, 2] It is now well settled that administrative agencies have only such powers as are expressly granted by statute, or such as are necessarily implied therein to enable them to carry out the purposes of the statute. The powers of the Railroad Commission given by the law in question relate only to the terms, conditions, and provisions of the bond or policy itself. The Commission is not expressly nor by implication given any power to prescribe the terms or conditions upon which an insurance company may be

TEXAS COURT OF CIVIL APPEALS

authorized to do such business in Texas. That is a matter governed by the insurance laws, and administered exclusively by the Board of Insurance Commissioners under the provisions of Title 78 (Arts. 4679 to 5068), R. C. S. 1925. And when the Board of Insurance Commissioners under the provisions of law have ascertained whether or not an insurance company meets the requirements of the laws of Texas, has complied with the rules and regulations of that Board, and is entitled to write insurance in Texas, their determination of that matter is exclusive. The Railroad Commission was clearly without power to add any further, additional, or conflicting burdens upon such insurance companies which would restrict their rights to write the character of insurance or bonds in Texas authorized by law.

[3] As above stated, powers of such administrative agencies are limited to those expressly granted or necessarily implied by statute. *State v. Robison* (1930) 119 Tex. 302, 30 S. W. (2d) 292; *Commercial Standard Ins. Co. v. Insurance Comrs.* (Tex. Civ. App. 1930) 34 S. W. (2d) 343, writ refused; *Railroad Commission v. South-*

western Greyhound Lines (Tex. Civ. App. 1936) 15 P.U.R.(N.S.) 504, 92 S. W. (2d) 296; *Railroad Commission v. Red Arrow Freight Lines* (Tex. Civ. App. 1936) 96 S. W. (2d) 735. It is clear, we think, that in so far as the rule attacked undertakes to require of the insurer a deposit with the state treasurer of \$50,000 in cash or securities, it is a clear attempt to add to such insurer's right to do business in Texas an additional burden after it had been granted such right by the Board of Insurance Commissioners, the agency designated by law to pass upon such requirements. Not only was that portion of the order attacked not authorized by the provisions of the statute giving to the Railroad Commission power to require policies of those seeking to use the highways as motor carriers; but it clearly would amount to an invasion by the Commission of a field of regulation vested exclusively in the Board of Insurance Commissioners.

The judgment of the trial court enjoining the enforcement of this rule was, we think, clearly correct, and the judgment will be affirmed.

Affirmed.

COLORADO PUBLIC UTILITIES COMMISSION

Re Harold C. Groendyke

[Application No. 4353-PP, Decision No. 12959.]

Monopoly and competition, § 62 — Motor carriers — Statutes.

The statutes provide that the Commission may not issue a certificate of convenience and necessity if it believes that the granting of same might impair the efficient public service of any authorized motor carrier then

RE GROENDYKE

adequately serving the same route, and they do not provide that a permit may not be issued for service which is adequately furnished by both common and private carriers.

[February 1, 1939.]

PETITION for rehearing of proceeding granting certificate of convenience and necessity; denied.

APPEARANCES: Harold C. Groendyke, Enid, pro se; A. J. Fregeau, Denver, for Weicker Transportation Company; Zene D. Bohrer, Denver, for The Motor Truck Common Carriers Association; Marion F. Jones, Denver, for The Colorado Trucking Association and J. H. Harriss, doing business as Manzanola Transfer.

By the COMMISSION: On December 23, 1935, the Commission entered its order granting the above-named applicant certain authority to operate as a Class "B" private carrier within this state.

Thereafter, on January 6, 1939, a petition for rehearing was filed by Marion F. Jones, as attorney for The Colorado Trucking Association and J. H. Harriss, doing business as Manzanola Transfer.

The grounds set forth for rehearing are to the effect, inter alia, that the decision of the Commission is contrary to the evidence and violates the statutes of the state of Colorado by granting a permit for service which is adequately taken care of by both private and common carriers.

We might point out that the statutes of the state do not provide that a permit may not be issued for service which is adequately taken care of by both common and private carriers,

but, on the contrary, such statutes provide that the Commission may not issue a permit if we are of the opinion that the granting of same might impair "the efficient public service of any authorized motor vehicle common carrier or carriers then adequately serving the same territory over the same general highway route or routes."

It is pointed out in said petition for rehearing that the headquarters of applicant are at Enid, Oklahoma, and that our decision was based on the fact that the location of the headquarters of J. H. Harriss are distant many miles from Shamrock. We might point out that applicant agreed to maintain equipment at Shamrock, Colorado, without any restrictions as to the amount of traffic which said company might have available for him. On the contrary, the testimony disclosed that Mr. Harriss, or any of the other protestants, would not be willing to maintain equipment at Shamrock unless guaranteed a certain volume of traffic.

We have considered all matters alleged in said petition for rehearing and believe that no purpose would be served by granting the same.

After a careful consideration of the record, the Commission is of the opinion, and so finds, that said petition for rehearing should be denied.

UTAH PUBLIC SERVICE COMMISSION

UTAH PUBLIC SERVICE COMMISSION

Re Union Pacific Railroad

[Case No. 2142.]

Crossings, § 43 — Elimination of grade crossings — Revocation of order.

The Commission will set aside its order demanding the closing of a grade crossing where such order was based upon the assumption that a right of way could be procured for the improvement of a road near this crossing and the making of another crossing near by more convenient, safe, and accessible, and where, upon rehearing, it appears that such a right of way cannot be obtained.

Crossings, § 42 — Elimination of grade crossings — Duty of Commission.

Statement that it is the Commission's duty to order the closing of crossings which are hazardous when it is for the convenience and safety of the public generally and when hazards can be materially reduced thereby, even though the residents of any particular community may oppose the closing of the crossing, p. 127.

(WIESLEY, Commissioner, dissents.)

[February 2, 1939.]

REHEARING to determine whether a previous order closing a crossing should be set aside; original order revoked and rescinded.

APPEARANCES: Robert B. Porter, Attorney, for Union Pacific Railroad Co.; Maurice Housecroft, for State Road Commission; Walter W. Steed, Jr., for residents in the territory; I. H. Barlow, for residents in the territory.

By the COMMISSION: The Commission issued its original report and order in this case on October 28, 1938, in which it ordered the above-entitled crossing to be closed. On November 7, 1938, within the twenty days allowed by law for the filing of a petition for rehearing, Angus Stevens and other residents of the community near

Clearfield filed a petition for rehearing, and made representation to the Commission that there were matters of evidence pertinent to the issues involved in this case which had not been presented in the original hearing. The Commission ordered a rehearing to be set for December 14, 1938. Due and legal notice was given to all interested parties by mail and by publication in two issues of the Weekly Reflex, a newspaper of general circulation in the community where the crossing is located.

The matter came on for rehearing as scheduled at 10 o'clock A. M. on December 14, 1938, before the Commis-

RE UNION PACIFIC RAILROAD

sion and evidence was introduced concerning the closing of said crossing. It appeared to the Commission that the residents of Clearfield and vicinity who are practically the only ones using said crossing and consequently affected by its closing, are practically unanimous in their opposition to the closing of said crossing.

The Commission realizes its public duty is to order crossings closed which are hazardous when it is for the convenience and safety of the public generally, and when hazards can be materially reduced thereby, even though the residents of any particular community may oppose the closing of the crossing.

However, in the matter under consideration the original order of the Commission was based upon the supposition that a right of way could be procured for the improvement of a county road near this crossing and the making of another crossing near by more convenient, safe, and accessible. It now appears that this right of way cannot be obtained, partly because of a complete lack of coöperation on the part of residents and officials of Clearfield. Thus the closing of this crossing, though it might be accomplished even without the procurement of such right of way, would more seriously affect the convenience of the public than was contemplated when the original order was issued, and when procurement of the right of way and coöperation of the persons concerned appeared assured.

Upon consideration of the foregoing facts and those contained in the original report and order of the Commission in this matter, the Commis-

sion concludes that the crossing should not be closed at the present time.

It is therefore *ordered* that the original order requiring the closing of the crossing referred to in the caption of this case is hereby revoked and rescinded.

WIESLEY, Commissioner, dissenting: In the original order the Commission found:

"That the view between highway traffic and rail traffic proceeding north-
erly is partially obstructed. . . .

"That railroad traffic averages approximately twenty passenger trains and fifteen freight trains per day, with a maximum speed of 90 miles per hour for the passenger trains, and a speed of approximately 45 miles per hour for the freight trains.

"That due to the existing more adequately protected crossings in the vicinity, the traveling public will not be materially inconvenienced by the closing of said crossing.

"That all crossings where railroads and highways cross at grade are potentially dangerous, and that the grade crossing of said east and west road over the Union Pacific Railroad Company tracks is a hazard, due to the facts hereinbefore set forth."

Not one scintilla of evidence was introduced at the rehearing by the protestants to rebut the findings of the Commission as set forth in the original order and as herein quoted.

It is true that petitions were submitted, signed by practically all of the residents of the community affected by the original order. Courts have repeatedly held that such petitions are not evidence and may not be consid-

UTAH PUBLIC SERVICE COMMISSION

ered in the determination of the closing of a railroad crossing. There was no evidence introduced to show that the necessary rights of way could not be obtained at a reasonable cost. The Commission was informed, however, that the right of way would not be procured by any of the interested parties. I am opposed to establishing the precedent that the closing of a public crossing should be determined by a plebiscite and the refusal of the interested parties to expend a reasonable sum of money to obtain the rights of way made necessary by the closing of a public crossing.

If the original order was not based on the finding that the crossing was hazardous, but rather on the supposition that the interested parties would purchase the necessary rights of way, then the original order should never have been issued by this commission.

I was originally of the opinion that the crossing under consideration is hazardous and should be closed, particularly in view of the fact that the rights of way made necessary by the closing of the crossing can be procured at a reasonable cost, if that fact is at all pertinent. I am still of that opinion, for the reason that the protestants failed to produce any new or addition-

al evidence at the rehearing to indicate that the crossing in question is not a hazardous crossing.

We have heard a great deal in recent years about "horse and buggy days." This term applies with double force to many of the crossings now existing in the state of Utah. With the advent of the automobile and modern improved highways, many of the crossings in the state of Utah can be eliminated without any undue inconvenience to the traveling public.

I believe the crossing under consideration is entirely unnecessary and that no one will be seriously inconvenienced by its closing. Furthermore, I am of the opinion that the traveling public should be willing to suffer considerable inconvenience in order to promote safety, and to reduce to a minimum such accidents as have occurred recently in various sections of the state.

It would be far better to require users of the highways to travel a quarter of a mile farther than to needlessly subject them, and particularly children, to the hazards existing at railroad crossings.

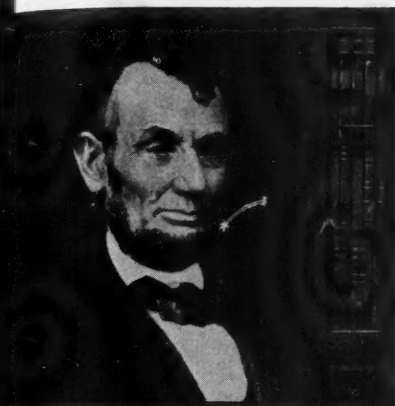
For the reasons above set forth, I dissent from the opinion of the majority.

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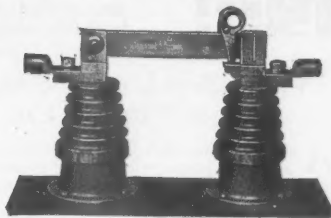
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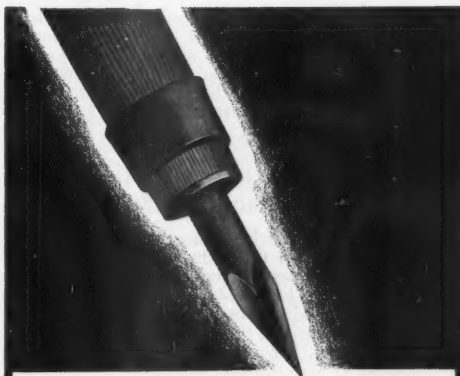


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Industrial Progress

Selected information about manufacturers, new products, and new methods. Also news on personnel changes, recent and coming events.



Visual Broadcasting Service Demonstrated at Fair

A VISUAL radio broadcasting service for use in public places where aural broadcasting is not practical, was inaugurated recently at the International Business Machines Corporation's exhibit at the New York World's Fair.

Utilizing the company's radiotype machine to transmit typewritten messages at one hundred words a minute, the service presents news bulletins on a large translux screen which enables a considerable gathering of visitors to read them simultaneously.

The function of the visual broadcasting service is the presentation of news bulletins and other types of information in public places such as railroad terminals, hotel and theatre lobbies, according to Frederick W. Nichol, vice president and general manager of International Business Machines Corporation.

Unlike television, the matter transmitted by radiotype can be magnified to almost any size desired and projected on a screen so that it can be seen by a large number of readers simultaneously. The written record remains for consulting or filing after it has been projected on the screen. One radiotype, broadcasting to a number of machines in public places throughout a metropolitan district, might easily serve a larger audience than that served by many of the present aural or television broadcasting stations.

Photo-electric Cell Aids Steel Manufacturer

THE first steel producer to apply scientific control to the manufacture of Bessemer steel, the Jones & Laughlin Steel Corporation, Pittsburgh, has made application for patent rights covering a method using photo-electric cell equipment in the operation of its Bessemer converters, according to a recent announcement by the company.

This scientific control is the first basic improvement in the history of Bessemer practice, and is one of several methods on which patent applications have been made by Jones & Laughlin. It is the result of several years' intensive work on the part of the J & L Metallurgical Department.

The new method, known as the "Bessemer Flame Control" has proved highly successful in achieving uniformity of quality in Bessemer steel, an objective long sought by the steel industry. Exhaustive tests of the new invention

were conducted in the Jones & Laughlin Steel Works over a period of many months.

This precision control has an arrangement of photo-electric cells as the actuating element. In conjunction with the cells and as a part of the control system, a complete instrument panel provides accurate regulation of blowing conditions.

Insulated Pipe Units Improved by Ric-wil

FOR underground steam distribution systems where economy in first cost as well as durability and thermal efficiency are prime considerations, the Ric-wil Company, Cleveland, Ohio, now offers its improved design insulated pipe units. These are supplied in standard lengths of 20 feet (or any other length) and include steam pipe, guides and supports for pipe, insulation, conduit housing, and all accessories including service connections. Units are effectively presealed against water. Since the product arrives on the job all ready for welding, installation labor factor is greatly reduced.

Material used for conduit housing itself is



Armco Hel-Cor spirally corrugated heavy gauge pure ingot iron. This outside pipe is galvanized and asphalt coated and is rolled with a water-tight lock seam. The manufacturer states that the installation provides unusual resistance to practically all known forms of underground deterioration.

Ric-wil insulated pipe units are furnished for either single or multiple pipe jobs, and for any kind of steam and return lines. Standard insulation is 85 per cent asbestos. Units are joined together in installation by a specially designed and easily installed connector sleeve, also made of Armco ingot iron.

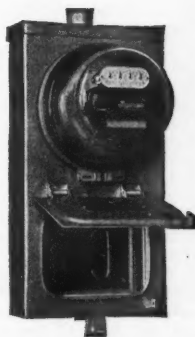
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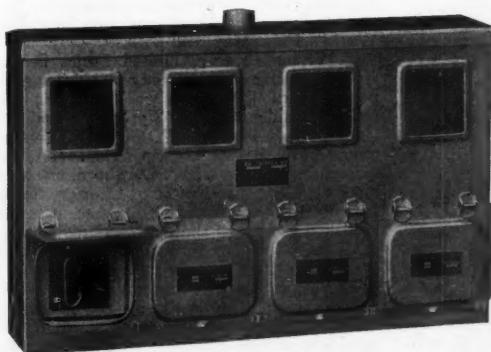
Prof. WECO



Standard and Socket Type METER BOXES



No. W-145



Illustrated: (upper right) W-145, weatherproof combination socket type meter box and service switch; (lower left) W-95-Q, 4-gang weatherproof combination standard type meter box and service switch, with space for test block. Finish: aluminum boxes (natural), steel boxes (aluminum, baked-on).

Walker engineers leave no detail to haphazard manufacturing guesswork. Every possible improvement vital to the user's interests is carefully checked in both blue print and finished product, so that Walker meter boxes will pass YOUR every test, just as they've weathered the test of factory inspection!

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Allis-Chalmers Elects Geist Vice President

WALTER Geist has been appointed vice president of the Allis-Chalmers Mfg. Company, according to a recent announcement by President Max Babb.

Born in Milwaukee, Mr. Geist entered the employ of Allis-Chalmers in February, 1909, as an errand boy in the saw mill engineering department. From that position he advanced to draftsman and progressed through various positions and departments in the company.

In the flour mill department he became interested in matters pertaining to design with particular reference to transmission; and as a result of this, originated the idea of the multiple V-belt drive principle of power transmission, known as the Texrope Drive. He first developed this from the engineering point of view and later as a sales engineer; and was made assistant manager of the milling department on July 1, 1928.

On July 1, 1933, Mr. Geist was appointed general representative, in which capacity he supervises the personnel of all district offices of the Allis-Chalmers Mfg. Company, both domestic and foreign.

26 "CP" Range Manufacturers

THE "CP" seal, which identifies "CP" Gas Ranges, is now a registered trade mark in Canada as well as in the United States, it has been announced by C. W. Berghorn, managing director of the Association of Gas Appliance and Equipment Manufacturers.

Twenty-six manufacturers are now licensed to produce and market these ranges which bear the "CP" insignia guaranteeing rigid "certified performance" features.

Utility Pushes Water Heaters

THE Consolidated Gas Electric Light & Power Co. of Baltimore, Md., will feature automatic hot water heaters in 11 x 42-inch transportation advertising appearing in Baltimore street cars and buses, according to a recent announcement by Barron G. Collier, Inc.

Fleischer Heads Sales for Walker Electrical Co.

THE Walker Electrical Company of Atlanta announces the appointment of T. J. Fleischer, of Philadelphia, as general sales manager for its electrical manufacturing division.

Mr. Fleischer came to his new post on May 15th from the Cross-Hinds Company, with whom he has been connected for a number of years. He is well known in the South, having travelled this section extensively and made friends in all branches of the electrical industry.

Walker Electrical Company entered the electrical manufacturing business a number of years ago, first building only sheet metal boxes of various types that were used in the contracting branch of the industry, and later branching out into the manufacture of panelboards, meter enclosures and numerous other items.

At the present, the company is erecting a new plant in Atlanta's northside section that will manufacture a complete line of outlet boxes and accessories, and will ultimately house the company's entire manufacturing division.

AGAEM Meets in New York and at World's Fair

LEADERS in government, banking, industry and the retail merchandising field discussed current trends and problems before the annual convention of the Association of Gas Appliance and Equipment Manufacturers, held at the Roosevelt Hotel and the New York World's Fair, May 24th-26th.

H. Styles Bridges, United States Senator from New Hampshire, George V. McLaughlin, president of the Brooklyn Trust Co., Saul Cohn, president of the National Retail Dry Goods Association, E. R. Guyer of Chicago, president of the Association, Frank H. Adams, vice president and C. W. Berghorn, managing director, George E. Frazer of Chicago, counsel for the Association and R. S. Agee, sales promotion manager of the Association's domestic gas range division were among the principal speakers in the three-day program.

The important part that gas and the gas industries are playing in the New York Exposition was discussed by Hugh H. Cuthrell, president of Gas Exhibits, Inc., at the closing session at the Fair, at which Lucian Kahn, of Hamilton, Ohio, chairman of the convention program committee presided.

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Inside one-hand lever control with light beam parallel to lever.

MANUFACTURERS OF WORLD'S MOST POWERFUL
HAND SEARCHLIGHTS

Sent on approval

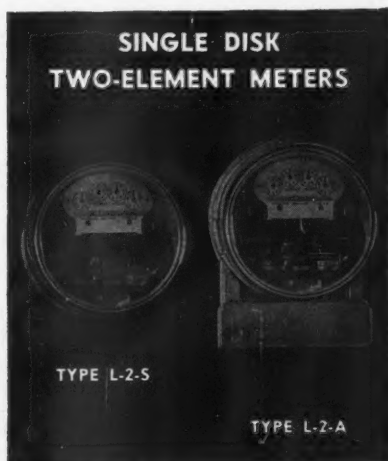
CARPENTER MFG. CO.—CAMBRIDGE, MASS.



TYPE T

SANGAMO TYPE L-2 METERS

The Type L-2 two-element meters comprise two complete electro-magnetic elements driving a single disk. They are designed for modern "A" and "S" mountings, thus combining convenience in installation with a minimum of space requirements. Electrical characteristics meet all the requirements for modern meter accuracy and performance.



Modern Meters for Modern Loads!

SANGAMO ELECTRIC COMPANY

SPRINGFIELD, ILLINOIS

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Water Heating Essay Contest Winners Announced

WINNERS of a nationwide essay contest for utility company employees which is part of the extensive promotional campaign for the sale of automatic gas water heaters being currently conducted by the Association of Gas Appliance and Equipment Manufacturers, under the direction of the National Automatic Gas Water Heater Sales Committee, have been announced by the Association.

The subject for this essay contest, which was open to all utility company employees, regardless of their respective positions, was "The Value of the Water Heating Load and How It May Be Secured."

Judges for the contest were: Floyd Parsons, of Gas Age; A. I. Phillips, of the American Gas Journal; Stanley Jenks, of Gas; and J. B. Read, of the Columbia Gas & Electric Corp., of New York. John W. Clark, chairman of the American Gas Association's water heater committee, and C. D. Byrd, of the Association of Gas Appliance and Equipment Manufacturers, assisted the committee of judges.

The first prize of \$500 was awarded to William H. Howe, of the Tucson Gas Electric Light and Power Co., of Tucson, Arizona.

C. C. Griswold, of the Brooklyn Union Gas Co., of Brooklyn, New York, was awarded the second prize of \$250. The third prize of \$150 was granted to E. W. Vick, of the New York State Electric & Gas Corp., of Cortland, New York.

W. Daniel Williams, of the Public Service Electric & Gas Corp., of Paterson, New Jersey, was winner of the fourth prize of \$100.

Low-cost Searchlight

At a cost less than half that of previous conventional units, General Electric has announced a simplified incandescent searchlight for long-range spot floodlighting. The new equipment was developed as a part of the floodlighting installation at the 1939 Golden Gate International Exposition, San Francisco. Several hundred of the lights are now being used there.

Designed for 1000-watt or 1500-watt spot-light or floodlight lamps, the new unit gives about a 10-degree beam spread. The Alzak-finished aluminum reflector, aided by an auxiliary reflector which builds up the beam efficiency and redirects stray light, is essentially the same as that used in more expensive equipment. A tilting support for the auxiliary

reflector simplifies relamping, and four hand-operated clamps secure the heat-resisting glass door, which is mounted in a cast-aluminum ring.

The new searchlight comes equipped with 6 feet of 2-conductor, No. 12 cable which has been approved by the Underwriters' Laboratory.

Watson Honored by Golden Gate Exposition

THOMAS J. Watson, president of International Business Machines Corporation and president of the International Chamber of Commerce, was honored by the Golden Gate International Exposition, when Fair officials set aside May 18th as "World Peace Day" and "I. B. M. Day," dedicated to the cause of World Peace Through World Trade, in recognition of the contributions of Mr. Watson and his organization toward the promotion of international understanding and the development of world trade.

Speakers at the dedication ceremonies in the Auditorium of the Hall of Western States, Treasure Island, included Mr. Watson; Leland W. Cutler, president of the Golden Gate International Exposition; Hon. Culbert L. Olson, Governor of California; Hon. George Creel, United States Commissioner, Golden Gate International Exposition; Dr. Rufus B. von Klein Smid, president of the University of Southern California; and Hon. Alfred J. Cleary, chief administrative officer, City and County of San Francisco.

15,000,000 Watts

An ordinary 25-watt incandescent lamp every 50 feet from San Francisco to New York City could be lighted by the electric power used in exterior illumination alone at the 1939 Golden Gate International Exposition, San Francisco. Including more than 10,000 fluorescent and incandescent floodlights, approximately 1,000 special decorative units, and nearly 700 street-lighting luminaires, the exterior fixtures installed by the Exposition Company use 4,741,000 watts, according to A. F. Dickerson, General Electric illumination engineer who created the lighting. The exterior lighting of the Federal, state, county, foreign, and other buildings, in addition to that for the various concessions, brings the total to 7,500,000 watts.

More startling, a coast-to-coast highway could be illuminated to modern safety standards if all the Exposition's power load, exterior and interior, were applied to sodium-vapor highway lights. Although exact figures as to this total load are not available, Mr. Dickerson estimates that the peak will reach 15,000,000 watts. That would light a 10,000-lumen sodium lamp every 200 feet across the continent—recommended highway-lighting practice.

ZENITH ELECTRIC CO.

Automatic Control Equipment
Magnetic Switches—Time Switches
Program Clocks—Automatic Timers
Special equipment made to your specifications.
603 So. Dearborn St. Chicago, Ill.

Mention the FORTNIGHTLY—It identifies your inquiry



At the close of our tenth year of business history, we look back over the past with a feeling of justifiable pride, with a deep appreciation for the loyalty of our many friends and customers.

We believe our record of consistent progress is due in no small part to the dependability of our product and the reliability of our service, backed by pioneering research and development based on sound engineering principles.

It is our hope that we may continue to serve you in the years to come even more efficiently than in the past, with a product built to fit your individual requirements!

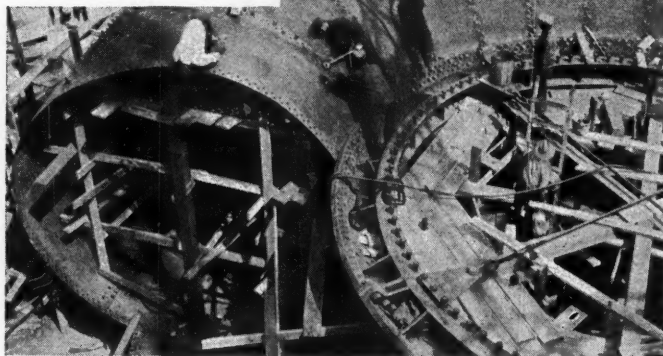


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BUTTERFLY VALVES
MECHANICAL RACK RAKES
GATES—HOISTS
PENSTOCKS, ETC.**



Bolting the Spiral Casing before Riveting

NEWPORT NEWS SHIPBUILDING AND DRY DOCK COMPANY
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NEWPORT NEWS, VA.

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**CHLORIDE
BATTERIES**



Where Only the Best Will Do

THOUSANDS of Exide-Chloride Batteries in the service of telephone, power and light, street railway and other public and private companies, attest the high regard in which these batteries are held by those who demand the finest quality in any equipment purchased.

THE ELECTRIC STORAGE BATTERY CO.

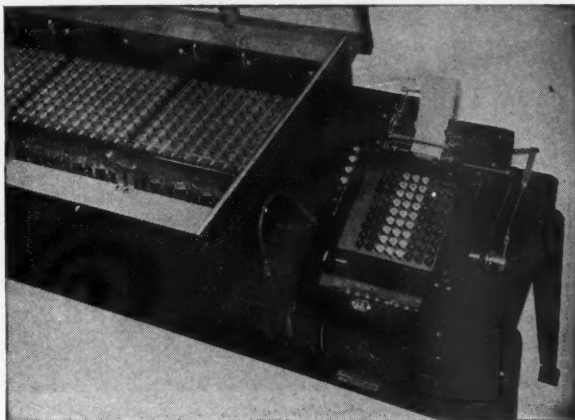
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THE ONE-STEP METHOD



OF BILL ANALYSIS

R & S Bill Frequency Analyzer: developed for our Utility Rate Service. The kw.-hrs. billed are entered on the adding machine keyboard. A tape is prepared of all items and a consumption total accumulated which serves as a control. At the same time—through this *single* operation—the bill count for each kw.-hr. step is made by the electrically controlled accumulating registers.

Estimates promptly submitted. Such marked savings that analyses now can be carried on currently for much less than former cost of periodic studies. Monthly or annual bill frequency tables now produced in a few days instead of weeks and months.

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MAKE INSULATION MEET THE TEST OF A GOOD INVESTMENT

GOOD investments can't be judged by price alone. More important is the security provided by full and continued dividends.

Primarily an investment, insulation must be bought on the same basis . . . must prove its worth in terms of maximum cash returns on fuel savings.

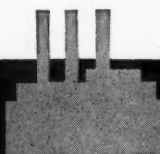
Throughout the country, hundreds of power plants have assured themselves of these insulation dividends. Johns-Manville Engineers, using J-M Insulations, have played an important

part in increasing plant efficiency and in reducing operating costs.

Backed by J-M's 75 years of research and field experience on insulation problems, these engineers can help you select the insulation best suited to each individual requirement in your plant. They work with insulations of maximum efficiency and uniformity and are able to recommend the right amount and proper application. For details, address Johns-Manville, 22 E. 40th St., N. Y. C.



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INDUSTRIAL INSULATIONS

An insulating material for every temperature . . . for every service condition

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Transmission line construc-
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HOOSIER ENGINEERING COMPANY

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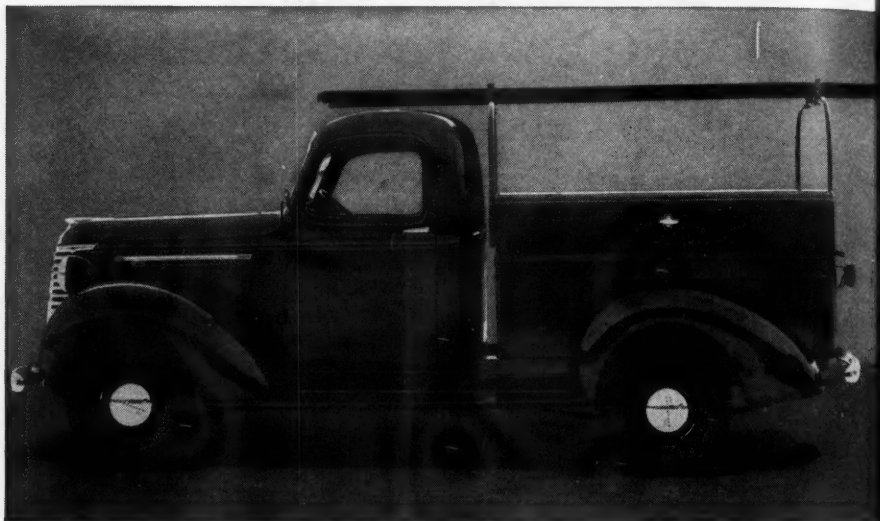
Canadian Hoosier Engineering Company, Ltd.
Montreal

RECTORS OF TRANSMISSION LINES

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The Truck Trend Proves It . . .

CHEVROLET'S the Chassis



American business and industry bought 115,426 trucks in the first quarter of 1939—a gain of 19,769 over the same period of last year. That is a nice increase for the truck industry—20.7 per cent.

American business and industry bought 41,555 Chevrolet trucks in the first quarter of 1939—a gain of 9,892 units over last year. And that is a nice increase for Chevrolet—31.2 per cent.

Chevrolet's gain over last year—exceeding the gain of all other makes combined—due to two main factors: First, Chevrolet proved records of efficient transportation at lowest cost; and, second, Chevrolet's enlarged line of models, making Chevrolet economy and excellence available in many more truck operations than ever before. Now there are 45 models to choose from—including one fitted to your needs.

CHEVROLET MOTOR DIVISION, General Motors Sales Corporation, DETROIT, MICHIGAN
General Motors Instalment Plan—convenient, economical monthly payments. A General Motors Value.

DESIGNED FOR THE LOAD  POWERED FOR THE PULL

MASSIVE NEW SUPREMLINE TRUCK STYLING . . . COUPE-TYPE CABS . . . VASTLY IMPROVED VISIBILITY • FAMOUS VALVE-IN-HEAD TRUCK ENGINE • POWERFUL HYDRAULIC TRUCK BRAKES (Vacuum-Power Brake Equipment optional on Heavy Duty models at additional cost) • FULL-FLOATING REAR AXLE on Heavy Duty models only (2-Speed Axle optional on Heavy Duty models at additional cost)

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A Salute-

to the Part Public Utilities are Playing In the World of Today and Tomorrow!

At the touch of a button, there is instant, friendly light. Through rain or snow, through wind or storm, the Public Utility stands back of that simple miracle . . . and it is taken for granted. And yet . . . the circle is larger and economically more important than just that . . .

Take the case of the Wisconsin Electric Power Company . . . a case that is typical of many other utilities all over the country.

Back in the dismal days of '32, the Wisconsin Electric Power Company, then known as the Milwaukee Electric Railway and Light Company, decided on a bold, courageous program of modernization . . . the building of the world's most efficient steam power plant, at Port Washington.

They spent \$8,000,000 . . . money to give employment to labor, to keep factories open, to keep wheels turning.

And where did this ever-widening chain of events lead? Money was spent . . . wisely, and at a time when it was most needed . . . for labor, for materials. And the chain still goes on . . . for today the plant at Port Washington, equipped by Allis-Chalmers, with a new world's record for economical power generation, provides residents of the Milwaukee area with low-cost electric service.

That's a record of public achievement in which Allis-Chalmers is proud to have played a part.

And it's for the many other timely achievements like this that Allis-Chalmers salutes the public utility field . . . as a force for progress in the world of today and tomorrow.



ALLIS-CHALMERS

MILWAUKEE • WISCONSIN

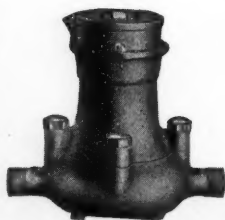
Looks are Deceptive

"A Wise Old Owl lived
in an Oak;
The more he saw, the
less he spoke.
The less he spoke, the
more he heard
Why can't we be like that
old bird?"
With hats off to the
unknown author.

He's a Wise "Old Owl" because he looks that way!

Even the ancient Greeks were so impressed with the Owl's looks they made the bird a symbol of supernatural wisdom. Which proves it's only human to be influenced by appearances. Whether it's Owls—or Water Meters—judge by proved facts! The fact of the water-meter-matter is that the worldwide reputation of Trident Meters for long life and high standards of sustained accuracy is based upon

years of actual performance. The principle of the sensitive Trident disc has been proved correct by service. The exclusive Trident principle of interchangeable parts has proved it eliminates obsolescence. In every way, Trident Water Meters have proved their superior Quality. That is why they are now, and will continue to be, the predominating choice of the Water Works field. Be really wise . . . buy TRIDENT.



**TRIDENT
SPLIT CASE**

1892—1939

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**PRECISION-BUILT
WATER
METERS**

Neptune Meter Company, 50 West 50th Street
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Offices in Principal Cities. Neptune Meters
Ltd., 345 Spadina Avenue, Toronto, Canada

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A set-up for meeting special requirements in strand

WHEN special characteristics are required in strand, the place to begin is at the open-hearth furnace. The complete integration of all manufacturing operations under Bethlehem's system of control, beginning with steel making and following through all subsequent phases, is an important factor in making strand to meet special conditions.

BETHLEHEM STEEL COMPANY



NEW, APPROVED, IMPROVED



SAFETY

INDUSTRIAL FLASHLIGHTS

THESE new "Eveready" focusing spotlights for use in explosive, gaseous atmosphere bear the inspection labels of *both* the U. S. Bureau of Mines and the Underwriters' Laboratories. They are **SAFE** under the dangerous atmospheric conditions listed on the label.

The new "Eveready" Safety Flashlights are of high quality semi-hard rubber reinforced with brass, with unbreakable, plastic lenses, special protected lamp and hand-replaceable, heavy-duty slide switch with positive "off" and "on" positions. Hexagonal heads prevent rolling, ring-hangers add to convenience.

"Eveready" Safety Flashlights resist water, oils, greases, gasoline, alcohol, acids, alkali, are non-conducting and proof against impact and dropping.



NATIONAL CARBON COMPANY, INC.

General Offices: New York, N. Y., Branches: Chicago and San Francisco

Unit of Union Carbide UCC and Carbon Corporation

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Billing Machines for 2c per day!

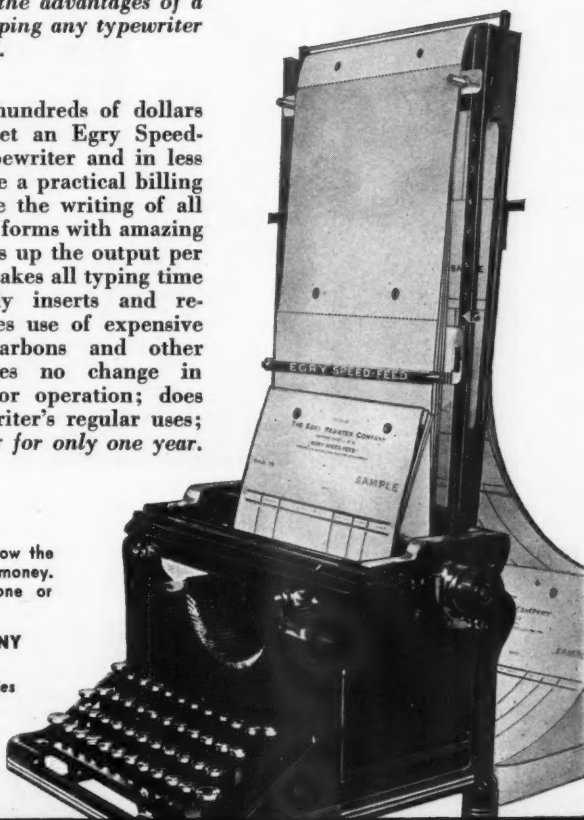
Almost unbelievable is the fact that, at a cost of less than 2c per day for only one year, you may enjoy all the advantages of a billing machine by equipping any typewriter with an Egry Speed-Feed.

No need now to invest hundreds of dollars in a billing machine. Get an Egry Speed-Feed! Slip it on any typewriter and in less than one minute you have a practical billing machine, ready to handle the writing of all multiple copy continuous forms with amazing speed and precision. Steps up the output per operator 50% or more; makes all typing time productive; automatically inserts and removes carbons; eliminates use of expensive preinserted, one-time carbons and other costly methods; requires no change in typewriter construction or operation; does not interfere with typewriter's regular uses; costs less than 2c per day for only one year.

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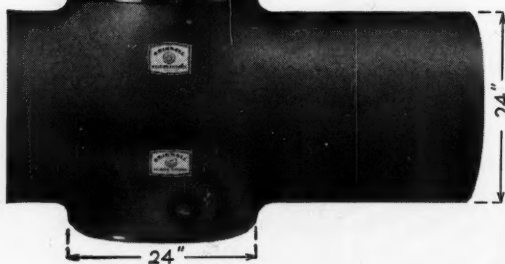
Sales agencies in all principal cities



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**PLANT
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LIKE THIS**
*Mean Better
Prefabrication!*



This exclusive Grinnell hydraulic extruder machine permits welded outlets to be made with plain circumferential butt welds—the strongest and easiest welds to make. It is one of the pieces of equipment which means better prefabrication from Grinnell.

Interpret Grinnell's facilities in terms of equipment like the above . . . in terms of men—qualified pressure-welders whose work readily passes insurance requirements . . . in terms of three plants, conveniently located to serve the continent . . . and these facilities will prove the wisdom of your decision to "Give the plans to Grinnell"! Grinnell Company, Inc., Executive Offices, Providence, Rhode Island, Branch offices in principal cities.

PREFABRICATION BY

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The Cure for "Paperitis" is

WAVERLY LEDGER

"Paperitis" is a disease that attacks accounting forms and records. Its symptoms are a dingy appearance, a droopy feeling and a rash of poor erasures and illegible typing or writing. It is caused by false economy in the selection of ledger paper.

Its cure is simple but mighty effective. Just standardize on Weston's *Waverly Ledger* for all important or much-used forms, account books or loose leaf sheets.

Waverly Ledger gives you the strength and durability of 85% rag content; a perfect surface for writing, typing or erasing; and a finish that is easy and pleasant to work on, yet it adds little to the total cost of accounts or records.

Write Byron Weston Co., Dept. C, Dalton, Mass., for sample book of Waverly Ledger showing all weights in White, Blue, Buff and Horizon Green,* and for *Weston's Papers*, an interesting and informative publication packed with ideas and information about paper.

*HORIZON GREEN is a new scientific eye-ease shade that reduces glare, makes bookkeeping easier and more efficient under all lighting conditions.

WESTON'S PAPERS

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“We ought to CUT government spending”

BUT—

That little word “but.” It makes the job so hard.

To get *tax* relief, we must first get *activity* relief. No good to rail at taxes and at the same time urge government activities in which we have a special interest.

• • • • •

THIS is a tax depression:

Business “enterprise” that must take risks, is working today almost solely to pay taxes and wages. Nothing left to reward the dollar that “ventures.” No daring to increase payrolls or take risks in new ventures—because there’s no telling what may happen to one item of expense—taxes.*

There’s a willingness on the part of Congress to effect economies which will not only reduce taxes but also move toward a balanced budget. There are honest and courageous men in Congress today who stand ready to take the hard road to recovery, if we citizens will only back them up.

A United States Senator said to us the other day: “Help us to create a sane sentiment on

public spending and borrowing. Citizens—and too often your businessmen—make it hard for us when they say ‘We’re for economy, but—don’t cut my pet activity.’”

• • • • •

DURING the Great War two soldiers in the trenches were talking:

“We’ll win,” said one, “if they’ll only hold out.”

“They? Who?” said the other.

“The civilians back home,” replied the first.

We’ll get tax reduction if and when the civilians back home demand it and, as Senator Borah once said, become indignant and even angry if they don’t get it.

* Write for free pamphlet “Taxes—and Recovery.”

**Government
Spending**



**1/4 of Our
Work Day**

This message is published by

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MAGIC* MARGIN

**ONLY
ROYAL
HAS IT**

The greatest achievement
in typewriter history

**NO FUSS
NO FRET**

Click **IT'S SET!**

*Trade Mark

On the New Royal, the operator merely positions the carriage . . . **MAGIC Margin** sets the stops —*automatically*. Startling? Yes! But only one of Royal's many Features of the Future! Try this great new typewriter. See how completely it helps make typing smoother, faster, easier! Give it **THE DESK TEST** and . . . Compare the Work!



**NEW
NUMBER**

1

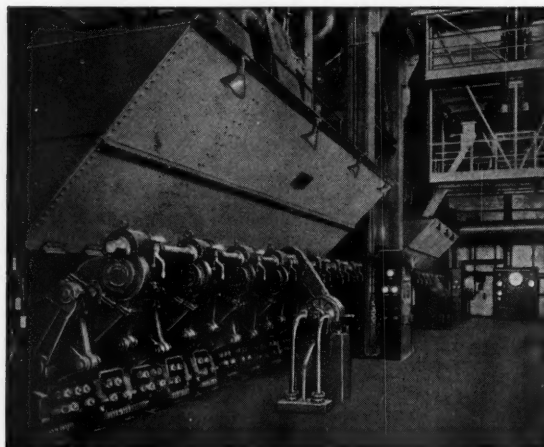
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ROYAL

MORE THAN EVER WORLD'S No. 1 TYPEWRITER

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What Do They Say about TODAY'S TAYLOR STOKER?



AN expression of basic satisfaction runs through all of these statements from users of today's Taylor Stokers. Essentially it is just this type of over-all satisfaction that is responsible for the increasing number of Taylor Stoker installations in prominent industries, institutions, and municipalities throughout the world. Today's Taylor Stoker is the result of many years of constant research and development on the part of A-E-CO engineers. It is well worth your careful investigation. Call in one of A-E-CO's representatives and get the FACTS!

The A-E-CO Taylor Stoker UNIT

A-E-CO PRODUCTS: Taylor Stokers, Water Cooled Furnaces, Ash Hoppers, Lo-Hed Hoists, Marine Deck Auxiliaries, Hele-Shaw Fluid Power.

"They are appealing to us because of their compactness, ruggedness, flexibility, minimum stack discharge, quick response to load demand, and efficiency."

"From all present indications, we believe that these two stokers are capable of continuing to reliably and economically serve us for many years to come."

"...our experience with Taylor Stokers has been most satisfactory."

"Our experience, thus far, and tests conducted on various coals have convinced us of their fuel flexibility, and because of this feature alone we have already realized very attractive savings in fuel costs."

"Due to the nature of our business the load is variable and the stokers have demonstrated their ability to take the swings in the load very well indeed."

"The availability factor has been very high."

AMERICAN ENGINEERING COMPANY



PHILADELPHIA, PA. • IN CANADA: AFFILIATED ENGINEERING CORPORATIONS, LTD., MONTREAL, P. Q.

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Tops Them All
ON DRAW BAR PULL



ANY MODEL in the extensive valve-in-head General Motors Truck line—is pounds above any comparable truck on draw bar pull!

Performance records prove it. GMC SUPER-

DUTY engines with POWER-PAK pistons lead in *gas savings!*

Actual tests prove greater savings than are possible with any comparable truck. And reports from owners show average gas savings 15% to 40% over the next best records.

Get the most power—get the most savings—get a GMC!

CHECK GMC PRICES AGAINST THE LOWEST!

Our own YMAC Time Payment Plan assures you of lowest available rates

GMC TRUCKS TRAILERS
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= **SUPERIOR**
REG. U. S. PAT. OFF.

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THE SUPERIOR SWITCHBOARD & DEVICES CO.
CANTON, OHIO

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METER & RELAY TEST SWITCHES METER TEST BLOCKS & TABLES
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Public Utilities Fortnightly

THE review magazine of current opinion and news relating to public utilities. Conducted as an open forum for the frank discussion of both sides of controversial questions—economic, legal and financial; also gives trends in the present-day control of these companies—governmental competition—state and Federal regulation.

¶ Issued every other Thursday—26 numbers a year—annual subscription \$15.00.

¶ The only magazine furnishing current and vital information on all subjects involving the financing, operation, and management of public utilities under governmental regulation and competition.

¶ A magazine of unusual value and current stimulation to all persons holding positions with, or having a financial interest in, public utilities.

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In order to make your New York World's Fair visit more enjoyable, we have prepared a map of the Fair Grounds, together with a New Transit Map of Greater New York outlining public transportation systems, auto routes, places of interest and many other attractive features.

To get your copy address

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745 FIFTH AVE., NEW YORK CITY

Problems in PUBLIC UTILITY ECONOMICS AND MANAGEMENT

By C. O. Ruggles

*Professor of Public Utility Management
Harvard University*

772 pages, 6 x 9, \$6.00

New 2nd Edition

This new book provides a comprehensive understanding of the problems of public utility economics, management and regulation. The problems presented for analysis and solution deal primarily with economic and business aspects of public utilities in the light of their marked physical expansion as well as the striking changes in organization and management during the past five years.

One hundred and twenty problems are given—each presented with considerable statistical background, and followed by questions indicating the significant issues.

Special Features of the Revised Edition:

- the chapter on production problems, showing the significance of load factor and the advantages of physical integration and coordination of facilities.
- the role played by holding companies; the responsibility of management for development of the business and for efficient service.
- wholesale and retail marketing of public utility service, with special consideration of rates and demand for service, off-peak utilization of utility facilities, etc., etc.

PUBLIC UTILITIES REPORTS, INC.
MUNSEY BLDG. WASHINGTON, D. C.

**Do YOU want to cut pipe
with less effort and less
cutter wheel expense?**

**Then see the faster
RIGID with this
Forged Blade Wheel**



NEW fast cutting that ends your burr problem — because this blade wheel is *thin*. Many more cuts per wheel—because it's forged from special tool steel. That's why the **RIGID** Cutter saves you time, work and money. The steel reinforced cutter is warp-proof, always cuts true. You like the well-balanced feel of it, the easy spinning to size. Thousands of enthusiastic users will tell you it has no equal for speedy smooth low-cost pipe cutting. Four sizes for pipe up to 4 inches. Cost no more than old style cutters. Buy from your Supply House today.



THE RIDGE TOOL CO., ELYRIA, OHIO

**FAMOUS RIGID PIPE WRENCHES
CUTTERS • THREADERS • VISES • EXTRACTORS**

Nordstrom

Lubricated VALVES

meet every valve need

Superintendent says:

"By way of summation I want to say that our Nordstrom Valves are *doing the hard jobs well*. I don't have to worry about leaks or other valve failures when away from the plant."

Chief Engineer says:

"Prior to installing Nordstrom Valves we estimated our valve repairs at about \$5.00 per month per valve. Nordstroms, requiring practically no repairs, have greatly reduced this figure."

Production Manager says:

"We are operating with fewer line troubles than ever before, thanks to a policy of installing Nordstroms as replacements. Clogged valves and frequent difficulty of opening and closing ordinary valves are troubles nonexistent where Nordstroms are used."

Plant Chemist says:

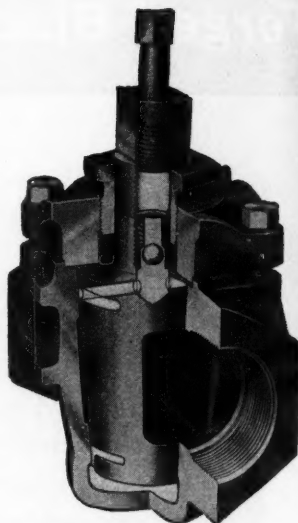
"We can now procure valves that withstand practically any chemical reaction by selecting Nordstroms made of special alloy metals."

Purchasing Agent says:

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Thursday, June 8

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Tuesday, June 6

Ladies Luncheon
World's Fair Session, afternoon
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Tour of electrical exhibits

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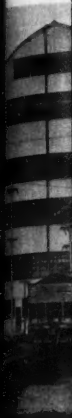
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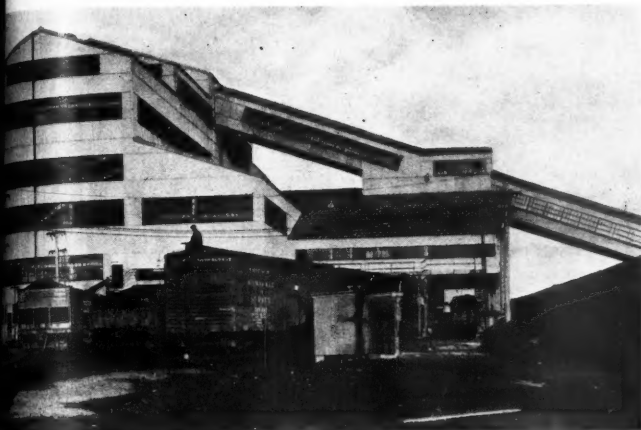
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